



09/493 795

1

SEQUENCE LISTING

B20

<110> Watkins, Maren
Olivera, Baldomero M.
Hillyard, David R.
McIntosh, J. Michael
Jones, Robert M.

<120> Alpha-Conotoxin Peptides

<130> 2314-179.A

<140> US 09/493,795
<141> 2000-01-28

<150> US 60/118,381
<151> 1999-01-29

<160> 404

<170> PatentIn Ver. 2.0

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<223> Description of Artificial Sequence:Alpha-Conotoxin Peptide Generic Formula I

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<222> (1)..(3)
<223> Xaa at residue 1 is des-Xaa, Ile, Leu or Val; Xaa at residue 2 is des-Xaa, Ala or Gly; Xaa at residue 3 is des-Xaa, Gly, Trp (D or L), neo-Trp, halo-Trp or any unnatural aromatic amino acid.

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<222> (4)..(5)
<223> N-methyl-Lys, Xaa at residue 4 is des-Xaa, Gly, Trp (D or L), neo-Trp, halo-Trp or any unnatural aromatic amino acid; Xaa at residue 5 is Glu, gamma-carboxy-Glu (Gla), Asp, Ala, Thr, Ser, Gly,

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<222> (5)..(8)
<223> Ile, Tyr, nor-Tyr, mono-halo-Tyr, di-halo-Tyr, O-sulpho-Tyr, O-phospho-Tyr, nitro-Tyr or any unnatural hydroxy containing amino acid; Xaa at residue 8 is Ser, Thr, Arg, ornithine,

<220>
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<222> (8)..(9)
<223> homoarginine, Lys, N,N-dimethyl-Lys, N,N,N-trimethyl-Lys or any unnatural basic amino acid; Xaa at residue 9 is Asp, Glu, Gla, Arg, ornithine, homoarginine, Lys, "methyl-Lys,N,N-dimethyl-

<220>

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<222> (9)..(11)
<223> Lys, N,N,N-trimethyl-Lys or any unnatural basic amino acid; Xaa at residue 10 is Ser, Thr, Asn, Ala, Gly, His, halo-His, Pro or hydroxy-Pro; Xaa at residue 11 is Thr, Ser, Ala, Asp, Asn,

<220>
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<222> (11)..(13)
<223> Pro, hydroxy-Pro, Arg, ornithine, homoarginine, Lys, N-methyl-Lys, N,N-dimethyl-Lys, N,N,N-trimethyl-Lys or any unnatural basic amino acid; Xaa at residue 13 is Gly, Ser, Thr, Ala, Asn,

<220>
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<222> (13)..(14)
<223> Arg, ornithine, homoarginine, Lys, N-methyl-Lys, N,N-dimethyl-Lys, N,N,N-trimethyl-Lys or any unnatural basic amino acid; Xaa at residue 14 is Gln, Leu, His, halo-His, Trp (D or L), halo-Trp,

<220>
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<222> (14)
<223> neo-Trp, Tyr, nor-Tyr, mono-halo-Tyr, di-halo-Tyr, O-sulpho-Tyr, O-phospho-Tyr, nitro-Tyr, Arg, ornithine, homoarginine, Lys, N-methyl-Lys, N,N-dimethyl-Lys, N,N,N-trimethyl-Lys, any unnatural

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<222> (14)..(15)
<223> basic amino acid or any unnatural aromatic amino acid; Xaa at residue 15 is Asn, His, halo-His, Ile, Leu, Val, Gln, Arg, ornithine, homoarginine, Lys, N-methyl-Lys, N,N-dimethyl-Lys, N,N,N-

<220>
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<222> (15)..(17)
<223> trimethyl-Lys or any unnatural basic amino acid; Xaa at residue 17 is des-Xaa, Val, Ile, Leu, Arg, ornithine, homoarginine, Lys, N-methyl-Lys, N,N-dimethyl-Lys, N,N,N-trimethyl-Lys or any

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<222> (17)
<223> unnatural basic amino acid.

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1 5 10 15

Xaa

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<213> Artificial Sequence

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<223> Description of Artificial Sequence:Alpha-Conotoxin
Peptide Generic Formula II.

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<222> (1)..(3)
<223> Xaa at residue 1 is des-Xaa, Asp, Glu or gamma-
carboxy-Glu (Gla); Xaa at residue 2 is des-Xaa,
Gln, Ala, Asp, Glu, Gla; Xaa at residue 3 is des-
Xaa, Gly, Ala, Asp, Glu, Gla, Pro or hydroxy-Pro.

<220>
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<222> (4)..(7)
<223> Xaa at residue 4 is des-Xaa, Gly, Glu, Gla, Gln,
Asp, Asn, Pro or hydroxy-Pro; Xaa at residue 7 is
Ser, Thr, Gly, Glu, Gla, Asn, Trp (D or L),
neo-Trp, halo-Trp, Arg, ornithine, homoarginine,

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<222> (7)
<223> Lys, N-methyl-Lys, N,N-dimethyl-Lys, N,N,N-
trimethyl-Lys, any unnatural basic amino acid,
Tyr, nor-Tyr, mono-halo-Tyr, di-halo-Tyr,
O-sulpho-Tyr, O-phospho-Tyr, nitro-Tyr or any

<220>
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<222> (7)..(8)
<223> unnatural hydroxy containing amino acid; Xaa at
residue 8 is Asp, Asn, His, halo-His, Thr, Ser,
Tyr, nor-Tyr, mono-halo-Tyr, di-halo-Tyr,
O-sulpho-Tyr, O-phospho-Tyr, nitro-Tyr or any

<220>
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<222> (8)..(10)
<223> unnatural hydroxy containing amino acid; Xaa at
residue 9 is Pro or hydroxy-Pro; Xaa at residue
10 is Ala, Ser, Thr, Asp, Val, Ile, Pro, hydroxy-
Pro, Tyr, nor-Tyr, mono-halo-Tyr, di-halo-Tyr,

<220>
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<222> (10)..(12)
<223> O-sulpho-Tyr, O-phospho-Tyr, nitro-Tyr or any
unnatural hydroxy containing amino acid; Xaa at
residue 12 is Gly, Ile, Leu, Val, Ala, Thr, Ser,
Pro, hydroxy-Pro, Phe, Trp (D or L), neo-Trp,

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<222> (12)..(13)
<223> halo-Trp, Arg, ornithine, homoarginine, Lys, N-
methyl-Lys, N,N-dimethyl-Lys, N,N,N-trimethyl-
Lys, any unnatural basic amino acid or any
unnatural aromatic amino acid; Xaa at residue 13

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<222> (13)
<223> is Ala, Asn, Phe, Pro, hydroxy-Pro, Glu, Gla,

Gln, His, halo-His, Val, Ser, Thr, Arg,
ornithine, homoarginine, Lys, N-methyl-Lys, N,N-
dimethyl-Lys, N,N,N-trimethyl-Lys or any

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<222> (13)..(14)
<223> unnatural basic amino acid; Xaa at residue 14 is
Thr, Ser, His, halo-His, Leu, Ile, Val, Asn, Met,
Pro, hydroxy-Pro, Arg, ornithine, homoarginine,
Lys, N-methyl-Lys, N,N-dimethyl-Lys, N,N,N-

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<222> (14)..(15)
<223> trimethyl-Lys, any unnatural basic amino acid,
Tyr, nor-Tyr, mono-halo-Tyr, di-halo-Tyr,
O-sulpho-Tyr, O-phospho-Tyr, nitro-Tyr or any
unnatural hydroxy containing amino acid; Xaa at

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<222> (15)
<223> residue 15 is Asn, Pro, hydroxy-Pro, Gln, Ser,
Thr, Arg, ornithine, homoarginine, Lys, N-methyl-
Lys, N,N-dimethyl-Lys N,N-trimethyl-Lys, any
unnatural basic amino acid, Tyr, nor-Tyr, mono-

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<222> (15)..(16)
<223> halo-Tyr, di-halo-Tyr, O-sulpho-Tyr, O-phospho-
Tyr, nitro-Tyr or any unnatural hydroxy contain-
ing amino acid; Xaa at residue 16 is des-Xaa,
Gly, Thr, Ser, Pro, hydroxy-Pro, Tyr, nor-Tyr,

<220>
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<222> (16)..(17)
<223> mono-halo-Tyr, di-halo-Tyr, O-sulpho-Tyr,
O-phospho-Tyr, nitro-Tyr or any unnatural hydroxy
containing amino acid; Xaa at residue 17 is des-
Xaa, Ile, Val, Asp, Leu, Phe, Arg, ornithine,

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<222> (17)
<223> homoarginine, Lys, N-methyl-Lys, N,N-dimethyl-
Lys, N,N,N-trimethyl-Lys, any unnatural basic
amino acid, Tyr, nor-Tyr, mono-halo-Tyr, di-halo-
Tyr, O-sulpho-Tyr, O-phospho-Tyr, nitro-Tyr or

<220>
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<222> (17)..(19)
<223> any unnatural hydroxy containing amino acid; Xaa
at residue 19 is des-Xaa, Gly, Ala, Met, Ser,
Thr, Trp (D or L), neo-Trp, halo-Trp, any
unnatural aromatic amino acid, Arg, ornithine,

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<222> (19)..(20)
<223> homoarginine, Lys, N-methyl-Lys, N,N-dimethyl-

Lys, N,N,N-trimethyl-Lys or any unnatural basic amino acid; Xaa at residue 20 is des-Xaa, Trp (D or L), neo-Trp, halo-Trp, any unnatural

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<222> (20)..(21)
<223> aromatic amino acid, Arg, ornithine, homoarginine, Lys, N-methyl-Lys, N,N-dimethyl-Lys, N,N,N-trimethyl-Lys or any unnatural basic amino acid; Xaa at residue 21 is des-Xaa, Arg,

<220>
<221> SITE
<222> (21)
<223> ornithine, homoarginine, Lys, N-methyl-Lys, N,N-dimethyl-Lys, N,N,N-trimethyl-Lys or any unnatural basic amino acid.

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<220>
<223> Description of Artificial Sequence:Alpha-Conotoxin Peptide Generic Formula III.

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<222> (1)..(3)
<223> Xaa at residue 1 is des-Xaa, Ser or Thr; Xaa at residue 2 is des-Xaa, Asp, Glu, gamma-carboxy-Glu (Gla), Asn, Ser or Thr; Xaa at residue 3 is des-Xaa, Ala, Gly, Asn, Ser, Thr, Pro, hydroxy-Pro,

<220>
<221> SITE
<222> (3)..(4)
<223> Arg, ornithine, homoarginine, Lys, N-methyl-Lys, N,N-dimethyl-Lys, N,N,N-trimethyl-Lys or any unnatural basic amino acid; Xaa at residue 4 is des-Xaa, Ala, Val, Leu, Ile, Gly, Glu, Gln,

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<222> (4)..(5)
<223> Asp, Asn, Phe, Pro, hydroxy-Pro or any unnatural aromatic amino acid; Xaa at residue 5 is des-Xaa, Thr, Ser, Asp, Glu, Gla, Gln, Gly, Val, Asp, Asn, Ala, Pro, hydroxy-Pro, Arg, ornithine, homo-

<220>
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<222> (5)..(8)
<223> arginine, Lys, N-methyl-Lys, N,N-dimethyl-Lys,

N,N,N-trimethyl-Lys or any unnatural basic amino acid; Xaa at residue 8 is Thr, Ser, Asp, Asn, Met, Val, Ala, Gly, Leu, Ile, Phe, any unnatural

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 <222> (8)..(9)
 <223> aromatic amino acid, Pro, hydroxy-Pro, Tyr, nor-Tyr, mono-halo-Tyr, di-halo-Tyr, O-sulpho-Tyr, O-phospho-Tyr, nitro-Tyr or any unnatural hydroxy containing amino acid; Xaa at residue 9 is Ile,

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 <222> (9)
 <223> Leu, Val, Ser, Thr, Gln, Asn, Asp, Arg, His, halo-His, Phe, any unnatural aromatic amino acid, homoarginine, ornithine, Lys, N-methyl-Lys, N,N-dimethyl-Lys, N,N,N-trimethyl-Lys, any

<220>
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 <222> (9)..(10)
 <223> unnatural basic amino acid, Tyr, nor-Tyr, mono-halo-Tyr, di-halo-Tyr, O-sulpho-Tyr, O-phospho-Tyr, nitro-Tyr or any unnatural hydroxy containing amino acid; Xaa at residue 10 is Pro, hydroxy-

<220>
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 <222> (10)
 <223> Pro, Ser, Thr, Ile, Asp, Leu, Val, Gly, Ala, Phe, any unnatural aromatic amino acid, Arg, ornithine, homoarginine, Lys, N-methyl-Lys, N,N-dimethyl-Lys, N,N,N-trimethyl-Lys or any unnatural basic amino

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 <222> (11)
 <223> acid; Xaa at residue 11 is Val, Ala, Gly, Ile, Leu, Asp, Ser, Thr, Pro, hydroxy-Pro, Arg, ornithine, homoarginine, Lys, N-methyl-Lys, N,N-dimethyl-Lys, N,N,N-trimethyl-Lys or any

<220>
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 <222> (11)..(13)
 <223> unnatural basic amino acid; Xaa at residue 13 is His, halo-His, Arg, homoarginine, ornithine, Lys, N-methyl-Lys, N,N-dimethyl-Lys, N,N,N-trimethyl-Lys, any unnatural basic amino acid, Asn, Ala,

<220>
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 <222> (13)
 <223> Ser, Thr, Phe, Ile, Leu, Gly, Trp (D or L), neo-Trp, halo-Trp, any unnatural aromatic amino acid, Tyr, nor-Tyr, mono-halo-Tyr, di-halo-Tyr, O-sulpho-Tyr, O-phospho-Tyr, nitro-Tyr or any

<220>
 <221> SITE
 <222> (13)..(14)
 <223> unnatural hydroxy containing amino acid; Xaa at

residue 14 is Leu, Gln, Val, Ile, Gly, Met, Ala, Lys, N-methyl-Lys, N,N-dimethyl-Lys, N,N,N-trimethyl-Lys, Ser, Thr, Arg, homoarginine, ornithine,

<220>
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<222> (14)..(15)
<223> thine, any unnatural basic amino acid, Asn, Glu, Gla, Gln, Phe, Trp (D or L), neo-Trp, halo-Trp or any unnatural aromatic amino acid; Xaa at residue 15 is Glu, Gla, Gln, Asn, Asp, Pro, hydroxy-Pro,

<220>
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<222> (15)
<223> Ser, Gly, Thr, Lys, N-methyl-Lys, N,N-dimethyl-Lys, N,N,N-trimethyl-Lys, Arg, homoarginine, ornithine, any unnatural basic amino acid, Phe, His, halo-His, any unnatural aromatic acid, Leu,

<220>
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<222> (15)..(16)
<223> Met, Gly, Ala, Tyr, nor-Tyr, mono-halo-Tyr, di-halo-Tyr, O-sulpho-Tyr, O-phospho-Tyr, nitro-Tyr or any unnatural hydroxy containing amino acid; Xaa at residue 16 is His, halo-His, Asn, Thr,

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<222> (16)
<223> Ser, Ile, Val, Leu, Phe, any unnatural aromatic amino acid, Arg, homoarginine, ornithine, Lys, N-methyl-Lys, N,N-dimethyl-Lys, N,N,N-trimethyl-Lys, any unnatural basic amino acid, Tyr, nor-Tyr,

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<222> (16)..(17)
<223> mono-halo-Tyr, di-halo-Tyr, O-sulpho-Tyr, O-phospho-Tyr, nitro-Tyr or any unnatural hydroxy containing amino acid; Xaa at residue 17 is Ser, Thr, Ala, Gln, Pro, hydroxy-Pro, Gly, Ile, Leu,

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<222> (17)..(18)
<223> Arg, ornithine, homoarginine, Lys, N-methyl-Lys, N,N-dimethyl-Lys, N,N,N-trimethyl-Lys or any unnatural basic amino acid; Xaa at residue 18 is Asn, Glu, Gla, Asp, Gly, His, halo-His, Ala, Leu,

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<222> (18)
<223> Gln, Arg, ornithine, homoarginine, Lys, N-methyl-Lys, N,N-dimethyl-Lys, N,N,N-trimethyl-Lys, any unnatural basic amino acid, Tyr, nor-Tyr, mono-halo-Tyr, di-halo-Tyr, O-sulpho-Tyr, O-phospho-

<220>
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<222> (18)..(19)
<223> Tyr, nitro-Tyr or any unnatural hydroxy containing

amino acid; Xaa at residue 19 is Met, Ile, Thr, Ser, Val, Leu, Pro, hydroxy-Pro, Phe, any unnatural aromatic amino acid, Tyr, nor-Tyr, mono-

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<220>
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<222> (19)
<223> halo-Tyr, di-halo-Tyr, O-sulpho-Tyr, O-phospho-Tyr, nitro-Tyr, any unnatural hydroxy containing amino acid, Glu, Gla, Ala, His, halo-His, Arg, ornithine, homoarginine, Lys, N-methyl-Lys, N,N-
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<220>
<221> SITE
<222> (21)
<223> dimethyl-Lys, N,N,N-trimethyl-Lys or any unnatural basic amino acid; Xaa at residue 21 is des-Xaa, Gly, Asp, Asn, Ala, Ile, Leu, Ser, Thr, His, halo-His, Arg, ornithine, homoarginine, Lys, N-methyl-
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<220>
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<222> (21)..(22)
<223> Lys, N,N-dimethyl-Lys, N,N,N-trimethyl-Lys or any unnatural basic amino acid; Xaa at residue 22 is des-Xaa, Gly, Glu, Gla, Gln, Trp (D or L), neo-Trp, halo-Trp, any unnatural aromatic amino acid, Arg,
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<222> (22)..(23)
<223> ornithine, homoarginine, Lys, N-methyl-Lys, N,N-dimethyl-Lys, N,N,N-trimethyl-Lys or any unnatural basic amino acid; Xaa at residue 23 is des-Xaa, Ser, Thr, Val, Ile, Ala, Arg, ornithine, homo-
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<222> (23)..(24)
<223> arginine, Lys, N-methyl-Lys, N,N-dimethyl-Lys, N,N,N-trimethyl-Lys or any unnatural basic amino acid; Xaa at residue 24 is des-Xaa, Val, Asp, His, halo-His, Arg, ornithine, homoarginine, Lys, N-
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<222> (24)..(26)
<223> methyl-Lys, N,N-dimethyl-Lys, N,N,N-trimethyl-Lys or any unnatural basic amino acid; Xaa at residue 25 is des-Xaa, Asn, Pro or hydroxy-Pro; Xaa at residue 26 is des-Xaa, Arg, ornithine, homo-
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<220>
<221> SITE
<222> (26)..(28)
<223> arginine, Lys, N-methyl-Lys, N,N-dimethyl-Lys, N,N,N-trimethyl-Lys or any unnatural basic amino acid; Xaa at residue 27 is des-Xaa, Ser or Thr; Xaa at residue 28 is des-Xaa, Leu, Ile or Val.
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1 5 10 15

Xaa Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 20 25

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<212> PRT
<213> Conus imperialis

<220>
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<222> (2)..(11)
<223> Xaa at residue 2 is Glu or gamma-carboxy-Glu; Xaa
at residue 11 is Lys, N-methyl-Lys,
N,N-dimethyl-Lys or N,N,N-trimethyl-Lys.

<400> 4
Asp Xaa Cys Cys Ser Asp Ser Arg Cys Gly Xaa Asn Cys Leu
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<210> 5
<211> 12
<212> PRT
<213> Conus imperialis

<220>
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<222> (10)
<223> Xaa at residue 10 is Trp (D or L) or halo-Trp.

<400> 5
Ala Cys Cys Ser Asp Arg Arg Cys Arg Xaa Arg Cys
1 5 10

<210> 6
<211> 13
<212> PRT
<213> Conus regius

<400> 6
Phe Thr Cys Cys Arg Arg Gly Thr Cys Ser Gln His Cys
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<210> 7
<211> 13
<212> PRT
<213> Conus regius

<220>
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<222> (2)
<223> Xaa at residue 2 is Tyr, nor-Tyr, mono-halo-Tyr,
di-halo-Tyr, O-sulpho-Tyr, O-phospho-Tyr or
nitro-Tyr.

<400> 7
Asp Xaa Cys Cys Arg Arg His Ala Cys Thr Leu Ile Cys
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<210> 8

<211> 13
<212> PRT
<213> Conus regius

<220>
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<222> (2)..(8)
<223> Xaa at residue 2 is Tyr, nor-Tyr, mono-halo-Tyr,
di-halo-Tyr, O-sulpho-Tyr, O-phospho-Tyr or
nitro-Tyr; Xaa at residues 7 and 8 is Pro or
hydroxy-Pro.

<400> 8
Asp Xaa Cys Cys Arg Arg Xaa Xaa Cys Thr Leu Ile Cys
1 5 10

<210> 9
<211> 13
<212> PRT
<213> Conus regius

<220>
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<222> (6)..(10)
<223> Xaa at residue 6 is Pro or hydroxy-Pro; Xaa at
residue 10 is Tyr, nor-Tyr, mono-halo-Tyr,
di-halo-Tyr, O-sulpho-Tyr, O-phospho-Tyr or
nitro-Tyr.

<400> 9
Gly Cys Cys Ser Asp Xaa Arg Cys Arg Xaa Arg Cys Arg
1 5 10

<210> 10
<211> 13
<212> PRT
<213> Conus regius

<220>
<221> SITE
<222> (7)..(11)
<223> Xaa at residue 7 is Pro or hydroxy-Pro; Xaa at
residue 11 is Trp (D or L) or halo-Trp.

<400> 10
Gly Gly Cys Cys Ser Asp Xaa Arg Cys Ala Xaa Arg Cys
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<210> 11
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<212> PRT
<213> Conus regius

<220>
<221> SITE
<222> (3)..(10)
<223> Xaa at residue 3 is Trp (D or L) or halo-Trp; Xaa
at residue 9 is Glu or gamma-carboxy-Glu; Xaa at
residue 10 is Pro or hydroxy-Pro.

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<221> SITE
<222> (15)

<223> Xaa at residue 15 is Lys, N-methyl-Lys,
N,N-dimethyl-Lys or N,N,N-trimethyl-Lys.

<400> 11

Ile	Ala	Xaa	Asp	Ile	Cys	Cys	Ser	Xaa	Xaa	Asp	Cys	Asn	His	Xaa	Cys
1				5					10				15		

Val

<210> 12

<211> 12

<212> PRT

<213> Conus regius

<220>

<221> SITE

<222> (6)..(9)

<223> Xaa at residue 6 is Pro or hydroxy-Pro; Xaa at
residue 9 is Lys, N-methyl-Lys, N,N-dimethyl-Lys
or N,N,N-trimethyl-Lys.

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Gly	Cys	Cys	Ser	Asp	Xaa	Arg	Cys	Xaa	His	Gln	Cys
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<211> 14

<212> PRT

<213> Conus sponsalis

<220>

<221> SITE

<222> (5)..(11)

<223> Xaa at residues 5 and 11 is Pro or hydroxy-Pro;
Xaa at residue 8 is Lys, N-methyl-Lys,
N,N-dimethyl-Lys or N,N,N-trimethyl-Lys.

<400> 13

Cys	Cys	Ser	Asp	Xaa	Ala	Cys	Xaa	Gln	Thr	Xaa	Gly	Cys	Arg
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<210> 14

<211> 13

<212> PRT

<213> Conus sponsalis

<220>

<221> SITE

<222> (3)..(5)

<223> Xaa at residue 3 is Glu or gamma-carboxy-Glu; Xaa
at residue 5 is Pro or hydroxy-Pro.

<400> 14

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<211> 13
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 <213> Conus sulcatus

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 <223> Xaa at residue 4 is Trp or halo-Trp; Xaa at residue 6 is Pro or hydroxy-Pro; Xaa at residue 12 is Tyr, nor-Tyr, mono-halo-Tyr, di-halo-Tyr, O-sulpho-Tyr, O-phospho-Tyr or nitro-Tyr.

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 <212> PRT
 <213> Conus achatinus

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 <222> (2)..(11)
 <223> Xaa at residues 2 and 7 is Pro or hydroxy-Pro; Xaa at residue 11 is Lys, N-methyl-Lys, N,N-dimethyl-Lys or N,N,N-trimethyl-Lys.

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 1 5 10

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 <212> PRT
 <213> Conus bullatus

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 <222> (2)..(12)
 <223> Xaa at residues 2 and 8 is Pro or hydroxy-Pro; Xaa at residue 12 is Lys, N-methyl-Lys, N,N-dimethyl-Lys or N,N,N-trimethyl-Lys.

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 1 5 10 15

<210> 18
 <211> 14
 <212> PRT
 <213> Conus bullatus

 <220>
 <221> SITE
 <222> (1)..(11)
 <223> Xaa at residues 1, 2 and 7 is Pro or hydroxy-Pro; Xaa at residue 11 is Lys, N-methyl-Lys, N,N-dimethyl-Lys or N,N,N-trimethyl-Lys.

<400> 18

Xaa Xaa Cys Cys Asn Asn Xaa Ala Cys Val Xaa His Arg Cys
 1 5 10

<210> 19
 <211> 16
 <212> PRT
 <213> Conus bullatus

<220>
 <221> SITE
 <222> (2)..(13)
 <223> Xaa at residue 2 is Glu or gamma-carboxy-Glu; Xaa at residue 6 is Trp or halo-Trp; Xaa at residues 8 11 and 13 is Pro or hydroxy-Pro.

<400> 19
 Asp Xaa Asn Cys Cys Xaa Asn Xaa Ser Cys Xaa Arg Xaa Arg Cys Thr
 1 5 10 15

<210> 20
 <211> 13
 <212> PRT
 <213> Conus bullatus

<220>
 <221> SITE
 <222> (6)..(12)
 <223> Xaa at residues 6 and 7 is Pro or hydroxy-Pro; Xaa at residue 12 is Tyr, nor-Tyr, mono-halo-Tyr, di-halo-Tyr, O-sulpho-Tyr, O-phospho-Tyr or nitro-Tyr.

<400> 20
 Gly Cys Cys Ser Arg Xaa Xaa Cys Ala Val Leu Xaa Cys
 1 5 10

<210> 21
 <211> 13
 <212> PRT
 <213> Conus circumcisus

<220>
 <221> SITE
 <222> (6)
 <223> Xaa at residue 6 is Pro or hydroxy-Pro.

<400> 21
 Gly Cys Cys Gly Asn Xaa Asp Cys Thr Ser His Ser Cys
 1 5 10

<210> 22
 <211> 16
 <212> PRT
 <213> Conus stercusmuscarum

<220>
 <221> SITE
 <222> (6)..(11)
 <223> Xaa at residue 6 is Pro or hydroxy-Pro; Xaa at residue 11 is Glu or gamma-carboxy-Glu.

<400> 22
 Gly Cys Cys Ser Asn Xaa Val Cys His Leu Xaa His Ser Asn Met Cys
 1 5 10 15

<210> 23
 <211> 17
 <212> PRT
 <213> Conus obscurus

<220>
 <221> SITE
 <222> (6)..(15)
 <223> Xaa at residue 6 is Pro or hydroxy-Pro; Xaa at
 residue 14 is Glu or gamma-carboxy-Glu; Xaa at
 residue 15 is Tyr, nor-Tyr, mono-halo-Tyr,
 di-halo-Tyr, O-sulpho-Tyr, O-phospho-Tyr or

<220>
 <221> SITE
 <222> (15)
 <223> nitro-Tyr.

<400> 23
 Gly Cys Cys Ser Asn Xaa Val Cys Arg Gln Asn Asn Ala Xaa Xaa Cys
 1 5 10 15

Arg

<210> 24
 <211> 18
 <212> PRT
 <213> Conus textile

<220>
 <221> SITE
 <222> (1)..(15)
 <223> Xaa at residues 1, 7 and 14 is Pro or hydroxy-Pro;
 Xaa at residue 15 is Glu or gamma-carboxy-Glu.

<400> 24
 Xaa Gln Cys Cys Ser His Xaa Ala Cys Asn Val Asp His Xaa Xaa Ile
 1 5 10 15

Cys Arg

<210> 25
 <211> 18
 <212> PRT
 <213> Conus radiatus

<220>
 <221> SITE
 <222> (1)..(15)
 <223> Xaa at residues 1, 7 and 14 is Pro or hydroxy-Pro;
 Xaa at residues 2 and 15 is Glu or
 gamma-carboxy-Glu.

<400> 25
 Xaa Xaa Cys Cys Ser His Xaa Ala Cys Asn Val Asp His Xaa Xaa Ile

15
10 15

1 5

Cys Arg

<210> 26
<211> 18
<212> PRT
<213> Conus radiatus

<220>
<221> SITE
<222> (1)..(15)
<223> Xaa at residues 1, 7 and 14 is Pro or hydroxy-Pro;
Xaa at residue 15 is Glu or gamma-carboxy-Glu.

<400> 26
Xaa Gln Cys Cys Ser His Xaa Ala Cys Asn Val Asp His Xaa Xaa Ile
1 5 10 15

Cys Asp

<210> 27
<211> 18
<212> PRT
<213> Conus omaria

<220>
<221> SITE
<222> (1)..(15)
<223> Xaa at residues 1, 7 and 14 is Pro or hydroxy-Pro;
Xaa at residue 15 is Glu or gamma-carboxy-Glu.

<400> 27
Xaa Arg Cys Cys Ser His Xaa Ala Cys Asn Val Asp His Xaa Xaa Ile
1 5 10 15

Cys Arg

<210> 28
<211> 18
<212> PRT
<213> Conus omaria

<220>
<221> SITE
<222> (1)..(14)
<223> Xaa at residues 1, 7 and 14 is Pro or hydroxy-Pro.

<400> 28
Xaa Gln Cys Cys Ser His Xaa Ala Cys Asn Val Asp His Xaa Gly Ile
1 5 10 15

Cys Arg

<210> 29
<211> 18

<212> PRT
 <213> Conus omaria

<220>
 <221> SITE

<222> (1)..(15)
 <223> Xaa at residues 1, 7 and 14 is Pro or hydroxy-Pro;
 Xaa at residue 15 is Glu or gamma-carboxy-Glu.

<400> 29
 Xaa Gln Cys Cys Ser His Xaa Ala Cys Asn Val Asp His Xaa Xaa Thr
 1 5 10 15

Cys Arg

<210> 30
 <211> 18
 <212> PRT
 <213> Conus omaria

<220>
 <221> SITE
 <222> (1)..(15)

<223> Xaa at residues 1, 7 and 14 is Pro or hydroxy-Pro;
 Xaa at residue 15 is Glu or gamma-carboxy-Glu.

<400> 30
 Xaa Gln Cys Cys Ser His Xaa Ala Cys Asn Val Asp His Xaa Xaa Val
 1 5 10 15

Cys Arg

<210> 31
 <211> 18
 <212> PRT
 <213> Conus omaria

<220>
 <221> SITE
 <222> (1)..(15)

<223> Xaa at residues 1, 7 and 14 is Pro or hydroxy-Pro;
 Xaa at residue 15 is Glu or gamma-carboxy-Glu.

<400> 31
 Xaa Gln Cys Cys Ser His Xaa Ala Cys Asn Ile Asp His Xaa Xaa Ile
 1 5 10 15

Cys Arg

<210> 32
 <211> 21
 <212> PRT
 <213> Conus omaria

<220>
 <221> SITE
 <222> (1)..(15)
 <223> Xaa at residues 1, 7 and 14 is Pro or hydroxy-Pro;

Xaa at residue 15 is Glu or gamma-carboxy-Glu.

<400> 32
 Xaa Gln Cys Cys Ser His Xaa Ala Cys Asn Val Asp His Xaa Xaa Ile
 1 5 10 15

Cys Arg Arg Arg Arg
 20

<210> 33
 <211> 17
 <212> PRT
 <213> Conus betulinus

<220>
 <221> SITE
 <222> (7)..(15)
 <223> Xaa at residues 7 and 14 is Pro or hydroxy-Pro;
 Xaa at residue 15 is Glu or gamma-carboxy-Glu.

<400> 33
 Gly Gly Cys Cys Ser His Xaa Ala Cys Ala Val Asn His Xaa Xaa Leu
 1 5 10 15

Cys

<210> 34
 <211> 16
 <212> PRT
 <213> Conus betulinus

<220>
 <221> SITE
 <222> (6)..(14)
 <223> Xaa at residues 6 and 13 is Pro or hydroxy-Pro;
 Xaa at residue 14 is Glu or gamma-carboxy-Glu.

<400> 34
 Gly Cys Cys Ser His Xaa Ala Cys Ser Val Asn His Xaa Xaa Leu Cys
 1 5 10 15

<210> 35
 <211> 16
 <212> PRT
 <213> Conus dalli

<220>
 <221> SITE
 <222> (6)..(14)
 <223> Xaa at residues 6 and 13 is Pro or hydroxy-Pro;
 Xaa at residue 14 is Glu or gamma-carboxy-Glu.

<400> 35
 Gly Cys Cys Ser His Xaa Ala Cys Asn Val Asp His Xaa Xaa Ile Cys
 1 5 10 15

<210> 36
 <211> 19
 <212> PRT

<213> Conus obscurus

<220>

<221> SITE

<222> (6)..(18)

<223> Xaa at residues 6 and 15 is Pro or hydroxy-Pro;
Xaa at residue 11 is Lys, N,-methyl-Lys,
N,N-dimethyl-Lys or N,N,N-trimethyl-Lys; Xaa at
residues 14 and 18 is Glu or gamma-carboxy-Glu.

<400> 36

Gly	Cys	Cys	Ser	His	Xaa	Ala	Cys	Ser	Gly	Xaa	Thr	Gln	Xaa	Xaa	Cys
1					5				10					15	

Arg Xaa Ser

<210> 37

<211> 18

<212> PRT

<213> Conus tulipa

<220>

<221> SITE

<222> (1)..(14)

<223> Xaa at residues 1, 6 and 13 is Pro or hydroxy-Pro;
Xaa at residue 14 is Glu or gamma-carboxy-Glu.

<400> 37

Xaa	Cys	Cys	Ser	His	Xaa	Ala	Cys	Ser	Gly	Asn	Asn	Xaa	Xaa	Phe	Cys
1					5				10					15	

Arg Gln

<210> 38

<211> 18

<212> PRT

<213> Conus tulipa

<220>

<221> SITE

<222> (6)..(14)

<223> Xaa at residues 6 and 13 is Pro or hydroxy-Pro;
Xaa at residue 14 is Glu or gamma-carboxy-Glu.

<400> 38

Gly	Cys	Cys	Ser	His	Xaa	Ala	Cys	Ser	Gly	Asn	Asn	Xaa	Xaa	Phe	Cys
1					5				10					15	

Arg Gln

<210> 39

<211> 16

<212> PRT

<213> Conus pennaceus

<220>

<221> SITE

<222> (6)..(15)

<223> Xaa at residues 6, 7 and 13 is Pro or hydroxy-Pro;
 Xaa at residue 15 is Tyr, nor-Tyr, mono-halo-Tyr,
 di-halo-Tyr, O-sulpho-Tyr, O-phospho-Tyr or
 nitro-Tyr.

<400> 39
 Gly Cys Cys Ser His Xaa Xaa Cys Ala Met Asn Asn Xaa Asp Xaa Cys
 1 5 10 15

<210> 40

<211> 16

<212> PRT

<213> Conus pennaceus

<220>

<221> SITE

<222> (6)..(15)

<223> Xaa at residues 6, 7 and 13 is Pro or hydroxy-Pro;
 Xaa at residue 15 is Tyr, nor-Tyr, mono-halo-Tyr,
 di-halo-Tyr, O-sulpho-Tyr, O-phospho-Tyr or
 nitro-Tyr.

<400> 40

Gly Cys Cys Ser His Xaa Xaa Cys Phe Leu Asn Asn Xaa Asp Xaa Cys
 1 5 10 15

<210> 41

<211> 17

<212> PRT

<213> Conus textile

<220>

<221> SITE

<222> (6)..(13)

<223> Xaa at residues 6, 7 and 13 is Pro or hydroxy-Pro;
 Xaa at residue 11 is Lys, N-methyl-Lys,
 N,N-dimethyl-Lys or N,N,N-trimethyl-Lys.

<400> 41

Gly Cys Cys Ser Asn Xaa Xaa Cys Ile Ala Xaa Asn Xaa His Met Cys
 1 5 10 15

Gly

<210> 42

<211> 16

<212> PRT

<213> Conus distans

<220>

<221> SITE

<222> (6)..(13)

<223> Xaa at residues 6, 7 and 13 is Pro or hydroxy-Pro.

<400> 42

Gly Cys Cys Ser Asn Xaa Xaa Cys Ala His Asn Asn Xaa Asp Cys Arg
 1 5 10 15

<210> 43

<211> 17
 <212> PRT
 <213> Conus tulipa

<220>
 <221> SITE
 <222> (6)..(13)
 <223> Xaa at residues 6 and 13 is Pro or hydroxy-Pro.

<400> 43
 Gly Cys Cys Ser Asn Xaa Ala Cys Ala Gly Asn Asn Xaa His Val Cys
 1 5 10 15

Arg

<210> 44
 <211> 16
 <212> PRT
 <213> Conus dalli

<220>
 <221> SITE
 <222> (6)..(13)
 <223> Xaa at residues 6 and 13 is Pro or hydroxy-Pro.

<400> 44
 Gly Cys Cys Ser Arg Xaa Ala Cys Ile Ala Asn Asn Xaa Asp Leu Cys
 1 5 10 15

<210> 45
 <211> 20
 <212> PRT
 <213> Conus circumcisus

<220>
 <221> SITE
 <222> (6)..(14)
 <223> Xaa at residues 6 and 13 is Pro or hydroxy-Pro;
 Xaa at residues 11 and 14 is Glu or
 gamma-carboxy-Glu.

<400> 45
 Gly Cys Cys Ser Asn Xaa Val Cys His Val Xaa His Xaa Xaa Leu Cys
 1 5 10 15

Arg Arg Arg Arg
20

<210> 46
 <211> 18
 <212> PRT
 <213> Conus sulcatus

<220>
 <221> SITE
 <222> (7)..(15)
 <223> Xaa at residues 7, 12 and 14 is Pro or
 hydroxy-Pro; Xaa at residue 11 is Lys,
 N-methyl-Lys, N,N-dimethyl-Lys or
 N,N,N-trimethyl-Lys; Xaa at residue 15 is Glu or

<220>
<221> SITE
<222> (7)..(15)
<223> gamma-carboxy-Glu.

<400> 46
Gly Gly Cys Cys Ser Phe Xaa Ala Cys Arg Xaa Xaa Arg Xaa Xaa Met
1 5 10 15

Cys Gly

<210> 47
<211> 18
<212> PRT
<213> Conus textile

<220>
<221> SITE
<222> (1)..(15)
<223> Xaa at residues 1, 7 and 14 is Pro or hydroxy-Pro;
Xaa at residues 2 and 15 is Glu or
gamma-carboxy-Glu.

<400> 47
Xaa Xaa Cys Cys Ser Asp Xaa Arg Cys Asn Ser Ser His Xaa Xaa Leu
1 5 10 15

Cys Arg

<210> 48
<211> 18
<212> PRT
<213> Conus dalli

<220>
<221> SITE
<222> (1)..(15)
<223> Xaa at residues 1, 7 and 14 is Pro or hydroxy-pro;
Xaa at residue 15 is Glu or gamma-carboxy-Glu.

<400> 48
Xaa Gln Cys Cys Ser Asp Xaa Arg Cys Asn Val Gly His Xaa Xaa Leu
1 5 10 15

Cys Gly

<210> 49
<211> 18
<212> PRT
<213> Conus dalli

<220>
<221> SITE
<222> (1)..(15)
<223> Xaa at residue 1 is Gln or pyro-Glu; Xaa at
residues 7 and 14 is Pro or hydroxy-Pro; Xaa at
residue 15 is Glu or gamma-carboxy-Glu.

<400> 49
 Xaa Val Cys Cys Ser Asp Xaa Arg Cys Asn Val Gly His Xaa Xaa Ile
 1 5 10 15

Cys Gly

<210> 50
 <211> 16
 <212> PRT
 <213> Conus textile
 <220>
 <221> SITE
 <222> (6)..(13)
 <223> Xaa at residues 6, 7 and 13 is Pro or hydroxy-Pro.

<400> 50
 Gly Cys Cys Ser Arg Xaa Xaa Cys Ile Ala Asn Asn Xaa Asp Leu Cys
 1 5 10 15

<210> 51
 <211> 18
 <212> PRT
 <213> Conus omaria
 <220>
 <221> SITE
 <222> (1)..(15)
 <223> Xaa at residues 1 and 14 is Pro or hydroxy-Pro;
 Xaa at residue 15 is Glu or gamma-carboxy-Glu.

<400> 51
 Xaa Gln Cys Cys Ser His Leu Ala Cys Asn Val Asp His Xaa Xaa Ile
 1 5 10 15

Cys Arg

<210> 52
 <211> 19
 <212> PRT
 <213> Conus sulcatus
 <220>
 <221> SITE
 <222> (5)..(14)
 <223> Xaa at residue 5 is Tyr, nor-Tyr, mono-halo-Tyr,
 di-halo-Tyr, O-sulpho-Tyr, O-phospho-Tyr or
 nitro-Tyr; Xaa at residue 13 is Pro or
 hydroxy-Pro; Xaa at residue 14 is Glu or
 <220>
 <221> SITE
 <222> (14)..(18)
 <223> gamma-carboxy-Glu; Xaa at residue 18 is Trp or
 halo-Trp.

<400> 52
 Gly Cys Cys Ser Xaa Phe Asp Cys Arg Met Met Phe Xaa Xaa Met Cys

1

5

10

15

Gly Xaa Arg

<210> 53
<211> 18
<212> PRT
<213> Conus sulcatus

<220>
<221> SITE
<222> (11)..(12)
<223> Xaa at residue 11 is Lys, N-methyl-Lys,
N,N-dimethyl-Lys or N,N,N-trimethyl-Lys; Xaa at
residue 12 is Tyr, nor-Tyr, mono-halo-Tyr,
di-halo-Tyr, O-sulpho-Tyr, O-phospho-Tyr or

<220>
<221> SITE
<222> (12)..(15)
<223> nitro-Tyr; Xaa at residue 14 is Pro or hydroxy-
Pro; Xaa at residue 15 is Glu or gamma-carboxy-
Glu.

<400> 53
Gly Gly Cys Cys Ser Phe Ala Ala Cys Arg Xaa Xaa Arg Xaa Xaa Met
1 5 10 15

Cys Gly

<210> 54
<211> 20
<212> PRT
<213> Conus sulcatus

<220>
<221> SITE
<222> (7)..(15)
<223> Xaa at residue 7 is Pro or hydroxy-Pro; Xaa at
residue 10 is Tyr, nor-Tyr, mono-halo-Tyr,
di-halo-Tyr, O-sulpho-Tyr, O-phospho-Tyr or
nitro-Tyr; Xaa at residue 15 is Glu or

<220>
<221> SITE
<222> (7)..(15)
<223> gamma-carboxy-Glu.

<400> 54
Gly Gly Cys Cys Phe His Xaa Val Cys Xaa Ile Asn Leu Leu Xaa Met
1 5 10 15

Cys Arg Gln Arg
20

<210> 55
<211> 19
<212> PRT
<213> Conus betulinus

<220>
<221> SITE
<222> (7)..(15)
<223> Xaa at residues 7, 11 and 14 is Tyr, nor-Tyr,
mono-halo-Tyr, di-halo-Tyr, O-sulpho-Tyr,
O-phospho-Tyr; Xaa at residues 8, 9 and 15 is Pro
or hydroxy-Pro.

<220>
<221> SITE
<222> (12)..(16)
<223> Xaa at residues 12 and 16 is Glu or
gamma-carboxy-Glu.

<400> 55
Ser Ala Thr Cys Cys Asn Xaa Xaa Xaa Cys Xaa Xaa Thr Xaa Xaa Xaa
1 5 10 15

Ser Cys Leu

<210> 56
<211> 17
<212> PRT
<213> Conus betulinus

<220>
<221> SITE
<222> (5)..(13)
<223> Xaa at residues 5 and 12 is Tyr, no-Tyr,
mono-halo-Tyr, di-halo-Tyr, O-sulpho-Tyr,
O-phospho-Tyr or nitro-Tyr; Xaa at residues 6, 7
and 13 is Pro or hydroxy-Pro.

<220>
<221> SITE
<222> (10)..(14)
<223> Xaa at residues 10 and 14 is Glu or
gamma-carboxy-Glu.

<400> 56
Ala Cys Cys Ala Xaa Xaa Xaa Cys Phe Xaa Ala Xaa Xaa Xaa Arg Cys
1 5 10 15

Leu

<210> 57
<211> 19
<212> PRT
<213> Conus betulinus

<220>
<221> SITE
<222> (3)..(16)
<223> Xaa at residues 3, 12 and 16 is Glu or
gamma-carboxy-Glu; Xaa at residues 6, 7, 11 and 14
is Tyr, nor-Tyr, mono-halo-Tyr, di-halo-Tyr,
O-sulpho-Tyr, O-phospho-Tyr or nitro-Tyr.

<220>
<221> SITE

<222> (8)..(15)

<223> Xaa at residues 8, 9 and 15 is Pro or hydroxy-Pro.

<400> 57

Asn	Ala	Xaa	Cys	Cys	Xaa	Xaa	Xaa	Cys	Xaa	Xaa	Ala	Xaa	Xaa	Xaa
1				5				10				15		

Ile Cys Leu

<210> 58

<211> 227

<212> DNA

<213> Conus magus

<220>

<221> CDS

<222> (1)..(189)

<400> 58

atg	tgc	acc	gtg	ttt	ctg	ttg	gtc	ttg	gca	acc	act	gtc	gtt	tcc	48
Met	Phe	Thr	Val	Phe	Leu	Leu	Val	Val	Leu	Ala	Thr	Thr	Val	Val	Ser
1	5						10							15	

ttc	cct	tca	gat	cgt	gca	tct	gat	ggc	agg	aat	gcc	gca	gcc	aac	gac	96
Phe	Pro	Ser	Asp	Arg	Ala	Ser	Asp	Gly	Arg	Asn	Ala	Ala	Ala	Asn	Asp	
20							25							30		

aaa	gcg	tct	gac	gtg	atc	acg	ctg	gcc	ctc	aag	gga	tgc	tgt	tcc	aac	144
Lys	Ala	Ser	Asp	Val	Ile	Thr	Leu	Ala	Leu	Lys	Gly	Cys	Cys	Ser	Asn	
35						40				45						

cct	gtc	tgt	cac	ttg	gag	cat	tca	aac	ctt	tgt	ggt	aga	aga	cgc	189
Pro	Val	Cys	His	Leu	Glu	His	Ser	Asn	Leu	Cys	Gly	Arg	Arg	Arg	
50					55				60						

tgatgctcca ggaccctctg aaccacgacg ttcgagca 227

<210> 59

<211> 63

<212> PRT

<213> Conus magus

<400> 59

Met	Phe	Thr	Val	Phe	Leu	Leu	Val	Val	Leu	Ala	Thr	Thr	Val	Val	Ser
1	5						10							15	

Phe	Pro	Ser	Asp	Arg	Ala	Ser	Asp	Gly	Arg	Asn	Ala	Ala	Asn	Asp	
20							25							30	

Lys	Ala	Ser	Asp	Val	Ile	Thr	Leu	Ala	Leu	Lys	Gly	Cys	Cys	Ser	Asn
35						40				45					

Pro	Val	Cys	His	Leu	Glu	His	Ser	Asn	Leu	Cys	Gly	Arg	Arg	Arg
50					55				60					

<210> 60

<211> 208

<212> DNA

<213> Conus aulicus

<220>
<221> CDS
<222> (1)..(168)

<400> 60
atg ttc acc gtg ttt ctg ttg gtc ttg gca acc acc gtc gtt tcc 48
Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser
1 5 10 15
ttc act tca gat cgt gca tct gat ggc agg aag gac gca gcg tct ggc 96
Phe Thr Ser Asp Arg Ala Ser Asp Gly Arg Lys Asp Ala Ala Ser Gly
20 25 30
ctg atc gct ctg acc atc aag gga tgc tgt tct tat cct ccc tgt ttc 144
Leu Ile Ala Leu Thr Ile Lys Gly Cys Cys Ser Tyr Pro Pro Cys Phe
35 40 45
gcg act aat tca gac tat tgt ggt tgacgacgct gatgctccag gaccctctga 198
Ala Thr Asn Ser Asp Tyr Cys Gly
50 55
accacgacgt 208

<210> 61
<211> 56
<212> PRT
<213> Conus aulicus

<400> 61
Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser
1 5 10 15
Phe Thr Ser Asp Arg Ala Ser Asp Gly Arg Lys Asp Ala Ala Ser Gly
20 25 30
Leu Ile Ala Leu Thr Ile Lys Gly Cys Cys Ser Tyr Pro Pro Cys Phe
35 40 45
Ala Thr Asn Ser Asp Tyr Cys Gly
50 55

<210> 62
<211> 205
<212> DNA
<213> Conus aulicus

<220>
<221> CDS
<222> (1)..(174)

<400> 62
atg ttc acc gtg ttt ctg ttg gtc ttg gca acc acc gtc gtt tcc 48
Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser
1 5 10 15
ttc act tca gat cgt gca tct gat ggc agg aag gac gca gcg tct ggc 96
Phe Thr Ser Asp Arg Ala Ser Asp Gly Arg Lys Asp Ala Ala Ser Gly
20 25 30
ctg att gct ctg acc atg aag gga tgc tgt tct tat cct ccc tgt ttc 144
Leu Ile Ala Leu Thr Met Lys Gly Cys Cys Ser Tyr Pro Pro Cys Phe
35 40 45

27

gct act aat cca gac tgt ggt cga cga cgc tggatgctcca ggaccctctg
Ala Thr Asn Pro Asp Cys Gly Arg Arg Arg
50 55 194

aaccacgacg t 205

<210> 63
<211> 58
<212> PRT
<213> Conus aulicus

<400> 63
Met Phe Thr Val Phe Leu Leu Val Val Val Leu Ala Thr Thr Val Val Ser
1 5 10 15

Phe Thr Ser Asp Arg Ala Ser Asp Gly Arg Lys Asp Ala Ala Ser Gly
20 25 30

Leu Ile Ala Leu Thr Met Lys Gly Cys Cys Ser Tyr Pro Pro Cys Phe
35 40 45

Ala Thr Asn Pro Asp Cys Gly Arg Arg Arg
50 55

<210> 64
<211> 223
<212> DNA
<213> Conus textile

<220>
<221> CDS
<222> (1)..(192)

<400> 64
atg ttc acc gtg ttt ctg ttg gtt gtc ttg gca acc acc gtc gtt tcc 48
Met Phe Thr Val Phe Leu Leu Val Val Val Leu Ala Thr Thr Val Val Ser
1 5 10 15

tcc tct tca ggt cgt agt aca ttt cgt ggc agg aat gcc gca gcc aaa 96
Phe Ser Ser Gly Arg Ser Thr Phe Arg Gly Arg Asn Ala Ala Ala Lys
20 25 30

gct tct ggc ctg gtc agt ctg act gac agg aga cca gaa tgc tgt agt 144
Ala Ser Gly Leu Val Ser Leu Thr Asp Arg Arg Pro Glu Cys Cys Ser
35 40 45

gat cct cgc tgt aac tcg agt cat cca gaa ctt tgt ggt gga aga cgc 192
Asp Pro Arg Cys Asn Ser Ser His Pro Glu Leu Cys Gly Gly Arg Arg
50 55 60

tggatgctcca ggaccctctg aaccacgacg t 223

<210> 65
<211> 64
<212> PRT
<213> Conus textile

<400> 65
Met Phe Thr Val Phe Leu Leu Val Val Val Leu Ala Thr Thr Val Val Ser
1 5 10 15

Phe Ser Ser Gly Arg Ser Thr Phe Arg Gly Arg Asn Ala Ala Ala Lys
 20 25 30

Ala Ser Gly Leu Val Ser Leu Thr Asp Arg Arg Pro Glu Cys Cys Ser
 35 40 45

Asp Pro Arg Cys Asn Ser Ser His Pro Glu Leu Cys Gly Gly Arg Arg
 50 55 60

<210> 66

<211> 244

<212> DNA

<213> Conus textile

<220>

<221> CDS

<222> (1)..(168)

<400> 66

atg ttc acc gtg ttt ctg ttg gtc ttg gca acc gcc gtc gtt tcc 48
 Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Ala Val Val Ser
 1 5 10 15

ttc act tca gat cgt gca tct gat gac ggg aaa gcc gct gcg tct gac 96
 Phe Thr Ser Asp Arg Ala Ser Asp Asp Gly Lys Ala Ala Ser Asp
 20 25 30

ctg atc act ctg acc atc aag gga tgc tgt tct cgt cct ccc tgt atc 144
 Leu Ile Thr Leu Thr Ile Lys Gly Cys Cys Ser Arg Pro Pro Cys Ile
 35 40 45

gcg aat aat cca gac ttg tgt ggt tgacgacgct gatgctccag aacggctctga 198
 Ala Asn Asn Pro Asp Leu Cys Gly
 50 55

accacgacgt tcgagcaatg ttccaccgtgt ttctgttggt tgtctt 244

<210> 67

<211> 56

<212> PRT

<213> Conus textile

<400> 67

Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Ala Val Val Ser
 1 5 10 15

Phe Thr Ser Asp Arg Ala Ser Asp Asp Gly Lys Ala Ala Ala Ser Asp
 20 25 30

Leu Ile Thr Leu Thr Ile Lys Gly Cys Cys Ser Arg Pro Pro Cys Ile
 35 40 45

Ala Asn Asn Pro Asp Leu Cys Gly
 50 55

<210> 68

<211> 223

<212> DNA

<213> Conus textile

<220>

<221> CDS
<222> (1)..(183)

<400> 68
atg ttc acc gtg ttt ctg ttg gtc ttg gca acc acc gtc gtt tcc 48
Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser
1 5 10 15
ttc act tca ggt cgt aca ttt cgt ggc agg aat gcc gca gcc aaa 96
Phe Thr Ser Gly Arg Ser Thr Phe Arg Gly Arg Asn Ala Ala Lys
20 25 30
gcg tct ggc ctg gtc agt ctg act gac agg aga cca caa tgc tgt tct 144
Ala Ser Gly Leu Val Ser Leu Thr Asp Arg Arg Pro Gln Cys Cys Ser
35 40 45
cat cct gcc tgt aac gta gat cat cca gaa att tgt cgt tgaagacgct 193
His Pro Ala Cys Asn Val Asp His Pro Glu Ile Cys Arg
50 55 60
gatgctccag gaccctctga accacgacgt 223

<210> 69
<211> 61
<212> PRT
<213> Conus textile

<400> 69
Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser 15
1 5 10 15
Phe Thr Ser Gly Arg Ser Thr Phe Arg Gly Arg Asn Ala Ala Lys 30
20 25
Ala Ser Gly Leu Val Ser Leu Thr Asp Arg Arg Pro Gln Cys Cys Ser
35 40 45
His Pro Ala Cys Asn Val Asp His Pro Glu Ile Cys Arg
50 55 60

<210> 70
<211> 223
<212> DNA
<213> Conus radiatus

<220>
<221> CDS
<222> (1)..(183)

<400> 70
atg ttc acc gtg ttt ctg ttg gtc ttg gca acc acc gtc gtt tcc 48
Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser
1 5 10 15
ttc act tca ggt cgt cgt aca ttt cat ggc agg aat gcc gca gcc aaa 96
Phe Thr Ser Gly Arg Arg Thr Phe His Gly Arg Asn Ala Ala Lys
20 25 30
gcg tct ggc ctg gtc agt ctg act gac agg aga cca gaa tgc tgt tct 144
Ala Ser Gly Leu Val Ser Leu Thr Asp Arg Arg Pro Glu Cys Cys Ser
35 40 45

30

cat cct gcc tgt aac gta gat cat cca gaa att tgt cgt tgaagacgct
His Pro Ala Cys Asn Val Asp His Pro Glu Ile Cys Arg
50 55 60

gatgctccag gaccctctga accacgacgt

193

223

<210> 71
<211> 61
<212> PRT
<213> Conus radiatus

<400> 71
Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser
1 5 10 15

Phe Thr Ser Gly Arg Arg Thr Phe His Gly Arg Asn Ala Ala Ala Lys
20 25 30

Ala Ser Gly Leu Val Ser Leu Thr Asp Arg Arg Pro Glu Cys Cys Ser
35 40 45

His Pro Ala Cys Asn Val Asp His Pro Glu Ile Cys Arg
50 55 60

<210> 72
<211> 223
<212> DNA
<213> Conus radiatus

<220>
<221> CDS
<222> (1)..(183)

<400> 72
atg ttc acc gtg ttt ctg ttg gtt gtc ttg gca acc acc gtc gtt tcc 48
Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser
1 5 10 15

ttc act tca ggt cgt agt aca ttt cgt ggc agg aat gcc gca gcc aaa 96
Phe Thr Ser Gly Arg Ser Thr Phe Arg Gly Arg Asn Ala Ala Ala Lys
20 25 30

gcg tct ggc ctg gtc agt ctg act gac agg aga cca caa tgc tgt tct 144
Ala Ser Gly Leu Val Ser Leu Thr Asp Arg Arg Pro Gln Cys Cys Ser
35 40 45

cat cct gcc tgt aac gta gat cat cca gaa att tgc gat tgaagacgct
His Pro Ala Cys Asn Val Asp His Pro Glu Ile Cys Asp
50 55 60

gatgctccag gaccctctga accacgacgt

193

223

<210> 73
<211> 61
<212> PRT
<213> Conus radiatus

<400> 73
Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser
1 5 10 15

X / cont.

Phe Thr Ser Gly Arg Ser Thr Phe Arg Gly Arg Asn Ala Ala Ala Lys
 20 25 30

Ala Ser Gly Leu Val Ser Leu Thr Asp Arg Arg Pro Gln Cys Cys Ser
 35 40 45

His Pro Ala Cys Asn Val Asp His Pro Glu Ile Cys Asp
 50 55 60

<210> 74

<211> 218

<212> DNA

<213> Conus striatus

<220>

<221> CDS

<222> (1)..(171)

<400> 74

atg ttc act gtg ttt ctg ttg gtt gtc ttg gca atc act gtc gtt tcc 48
 Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Ile Thr Val Val Ser
 1 5 10 15

ttc cct tta gat cgt gaa tct gat ggc gcg aat gcc gaa gcc cgcc acc 96
 Phe Pro Leu Asp Arg Glu Ser Asp Gly Ala Asn Ala Glu Ala Arg Thr
 20 25 30

cac gat cat gag aag cac gca ctg gac cgcc aat gga tgc tgt agg aat 144
 His Asp His Glu Lys His Ala Leu Asp Arg Asn Gly Cys Cys Arg Asn
 35 40 45

cct gcc tgt gag agc cac aga tgt ggt tgacgacgct gatgctccag 191
 Pro Ala Cys Glu Ser His Arg Cys Gly
 50 55

gaccctctga accacgacgt tcgagca 218

<210> 75

<211> 57

<212> PRT

<213> Conus striatus

<400> 75

Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Ile Thr Val Val Ser 15
 1 5 10 15

Phe Pro Leu Asp Arg Glu Ser Asp Gly Ala Asn Ala Glu Ala Arg Thr
 20 25 30

His Asp His Glu Lys His Ala Leu Asp Arg Asn Gly Cys Cys Arg Asn
 35 40 45

Pro Ala Cys Glu Ser His Arg Cys Gly
 50 55

<210> 76

<211> 227

<212> DNA

<213> Conus bandanus

<220>

<221> CDS
<222> (1)..(180)

<400> 76
atg ttc acc atg ttt ctg ttg gtc ttg gca acc act gtc gtt tcc 48
Met Phe Thr Met Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser
1 5 10 15
ttc gct tca gat cgt gca tct gat ggc agg aat gcc gca gcc aag gac 96
Phe Ala Ser Asp Arg Ala Ser Asp Gly Arg Asn Ala Ala Lys Asp
20 25 30
aaa gcg tct gac ctg gtc gct ctg acc gtc aag gga tgc tgt tct cat 144
Lys Ala Ser Asp Leu Val Ala Leu Thr Val Lys Gly Cys Cys Ser His
35 40 45
cct gcc tgt agc gtg aat aat cca gac att tgt ggt tgaagacgct 190
Pro Ala Cys Ser Val Asn Asn Pro Asp Ile Cys Gly
50 55 60
gatgctccag gaccctctga accacgacgt tcgagca 227

<210> 77
<211> 60
<212> PRT
<213> Conus bandanus

<400> 77
Met Phe Thr Met Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser
1 5 10 15
Phe Ala Ser Asp Arg Ala Ser Asp Gly Arg Asn Ala Ala Lys Asp
20 25 30
Lys Ala Ser Asp Leu Val Ala Leu Thr Val Lys Gly Cys Cys Ser His
35 40 45
Pro Ala Cys Ser Val Asn Asn Pro Asp Ile Cys Gly
50 55 60

<210> 78
<211> 104
<212> DNA
<213> Conus bandanus

<220>
<221> CDS
<222> (1)..(54)
<400> 78
aaa gaa tgc tgt act cat cct gcc tgt cac gtg agt cat cca gaa ctc 48
Lys Glu Cys Cys Thr His Pro Ala Cys His Val Ser His Pro Glu Leu
1 5 10 15
tgt ggt tgaaaagcga cgtgacgctc caggaccctc tgaaccacga cgttcgagca 104
Cys Gly

<210> 79
<211> 18
<212> PRT
<213> Conus bandanus

<400> 79
 Lys Glu Cys Cys Thr His Pro Ala Cys His Val Ser His Pro Glu Leu
 1 5 10 15
 Cys Gly

<210> 80
<211> 206
<212> DNA
<213> Conus bandanus

<220>
<221> CDS
<222> (1)..(171)

<400> 80 48
atg ttc acc gtg ttt ctg ttg gtt gtc ttg gca act gct gtt ctt cca
Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Ala Val Leu Pro
1 5 10 15

gtc act tta gat cgt gca tct gat gga agg aat gca gca gcc aac gcc 96
Val Thr Leu Asp Arg Ala Ser Asp Gly Arg Asn Ala Ala Asn Ala
20 25 30

aaa acg cct cgc ctg atc gcg cca ttc atc agg gat tat tgc tgt cat 144
Lys Thr Pro Arg Leu Ile Ala Pro Phe Ile Arg Asp Tyr Cys Cys His
35 40 45

aga ggt ccc tgt atg gta tgg tgt ggt tgaagccgct gctgctccag 191
Arg Gly Pro Cys Met Val Trp Cys Gly
50 55

gaccctctga accac 206

<210> 81
<211> 57
<212> PRT
<213> Conus bandanus

<400> 81
Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Ala Val Leu Pro
1 5 10 15

Val Thr Leu Asp Arg Ala Ser Asp Gly Arg Asn Ala Ala Asn Ala
20 25 30

Lys Thr Pro Arg Leu Ile Ala Pro Phe Ile Arg Asp Tyr Cys Cys His
35 40 45

Arg Gly Pro Cys Met Val Trp Cys Gly
50 55

<210> 82
<211> 174
<212> DNA
<213> Conus characteristicus

<220>
<221> CDS
<222> (1)..(171)

<400> 82
atg ttc acc gtg ttt ctg ttg gtt gtc ttg gca acc act gtg gtt tcc
Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser
1 5 10 15 48

ttc act tca gat cgt gct tct gat ggc agg aat gcc gca gcc aac gcg
Phe Thr Ser Asp Arg Ala Ser Asp Gly Arg Asn Ala Ala Asn Ala 96
20 25 30

ttt gac ctg atc gct ctg atc gcc agg caa aat tgc tgt agc att ccc
Phe Asp Leu Ile Ala Leu Ile Ala Arg Gln Asn Cys Cys Ser Ile Pro
35 40 45 144

agc tgt tgg gag aaa tat aaa tgt agt taa
Ser Cys Trp Glu Lys Tyr Lys Cys Ser 174
50 55

<210> 83
<211> 57
<212> PRT
<213> Conus characteristicus

<400> 83
Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser
1 5 10 15 48

Phe Thr Ser Asp Arg Ala Ser Asp Gly Arg Asn Ala Ala Asn Ala 30
20 25 30

Phe Asp Leu Ile Ala Leu Ile Ala Arg Gln Asn Cys Cys Ser Ile Pro
35 40 45

Ser Cys Trp Glu Lys Tyr Lys Cys Ser 174
50 55

<210> 84
<211> 219
<212> DNA
<213> Conus characteristicus

<220>
<221> CDS
<222> (1)..(189)

<400> 84
atg ttc acc gtg ttt ctg ttg gtt gtc ttg gca acc act gtg gtt tcc 48
Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser
1 5 10 15

ttc act tca gat cgt gcg tct gaa ggc agg aat gct gca gcc aag gac
Phe Thr Ser Asp Arg Ala Ser Glu Gly Arg Asn Ala Ala Lys Asp 96
20 25 30

aaa gcg tct gac ctg gtg gct ctg aca gtc agg gga tgc tgt gcc att
Lys Ala Ser Asp Leu Val Ala Leu Thr Val Arg Gly Cys Cys Ala Ile 144
35 40 45

cgt gaa tgt cgc ttg cag aat gca gcg tat tgt ggt gga ata tac
Arg Glu Cys Arg Leu Gln Asn Ala Ala Tyr Cys Gly Gly Ile Tyr 189
50 55 60

tgatgctcca ggaccctctg aaccacgacg 219

35

<210> 85
<211> 63
<212> PRT
<213> Conus characteristicus

<400> 85
Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser
1 5 10 15
Phe Thr Ser Asp Arg Ala Ser Glu Gly Arg Asn Ala Ala Ala Lys Asp
20 25 30
Lys Ala Ser Asp Leu Val Ala Leu Thr Val Arg Gly Cys Cys Ala Ile
35 40 45
Arg Glu Cys Arg Leu Gln Asn Ala Ala Tyr Cys Gly Gly Ile Tyr
50 55 60

<210> 86
<211> 217
<212> DNA
<213> Conus tulipa

<220>
<221> CDS
<222> (1)..(186)

<400> 86
atg ttc acc gtg ttt ctg ttg gtt gtc ttg gca acc act gtc gtt tcc 48
Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser
1 5 10 15
ttc cct tca gat att gca act gag ggc agg aat gcc gca gcc aaa gcg 96
Phe Pro Ser Asp Ile Ala Thr Glu Gly Arg Asn Ala Ala Ala Lys Ala
20 25 30
ttt gac ctg ata tct tcg atc gtc aag aaa gga tgc tgt tcc cat cct 144
Phe Asp Leu Ile Ser Ser Ile Val Lys Lys Gly Cys Cys Ser His Pro
35 40 45
gcc tgt tcg ggg aat aat cca gaa ttt tgt cgt caa ggt cgc 186
Ala Cys Ser Gly Asn Asn Pro Glu Phe Cys Arg Gln Gly Arg
50 55 60
tgatgctcca ggaccctctg aaccacgacg t 217

<210> 87
<211> 62
<212> PRT
<213> Conus tulipa

<400> 87
Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser
1 5 10 15
Phe Pro Ser Asp Ile Ala Thr Glu Gly Arg Asn Ala Ala Ala Lys Ala
20 25 30
Phe Asp Leu Ile Ser Ser Ile Val Lys Lys Gly Cys Cys Ser His Pro
35 40 45

Ala Cys Ser Gly Asn Asn Pro Glu Phe Cys Arg Gln Gly Arg
 50 55 60

<210> 88
<211> 217
<212> DNA
<213> Conus tulipa

<220>
<221> CDS
<222> (1)..(186)

<400> 88
atg ttc acc gtg ttt ctg ttg gtc ttg gca acc act gtc gtt tcc 48
Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser
1 5 10 15

ttc cct tca gat ata gca act gag ggc agg aat gcc gca gcc aaa gcg 96
Phe Pro Ser Asp Ile Ala Thr Glu Gly Arg Asn Ala Ala Ala Lys Ala
20 25 30

ttt gac ctg ata tct tcg atc gtc agg aaa gga tgc tgt tcc aat ccc 144
Phe Asp Leu Ile Ser Ser Ile Val Arg Lys Gly Cys Cys Ser Asn Pro
35 40 45

gcc tgt gcg ggg aat aat cca cat gtt tgt cgt caa ggt cgc 186
Ala Cys Ala Gly Asn Asn Pro His Val Cys Arg Gln Gly Arg
50 55 60

tgatgctcca ggaccctctg aaccacgacgt 217

<210> 89
<211> 62
<212> PRT
<213> Conus tulipa

<400> 89
Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser
1 5 10 15

Phe Pro Ser Asp Ile Ala Thr Glu Gly Arg Asn Ala Ala Ala Lys Ala
20 25 30

Phe Asp Leu Ile Ser Ser Ile Val Arg Lys Gly Cys Cys Ser Asn Pro
35 40 45

Ala Cys Ala Gly Asn Asn Pro His Val Cys Arg Gln Gly Arg
50 55 60

<210> 90
<211> 226
<212> DNA
<213> Conus sulcatus

<220>
<221> CDS
<222> (1)..(195)

<400> 90
atg ttc acc gtg ttt ctg ttg gtc ttg gca acc acc gtc gtt tcc 48
Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser

37

1 5. 10 15 96
ttc aat tca gat cgt gat cca gca tta ggt ggc agg aat gct gca gcc
Phe Asn Ser Asp Arg Asp Pro Ala Leu Gly Gly Arg Asn Ala Ala Ala
20 25 30 35 40 45 144
aaa gcg tct gac aag atc gct tcg acc ctc aag aga aga gga tgc tgt
Lys Ala Ser Asp Lys Ile Ala Ser Thr Leu Lys Arg Arg Gly Cys Cys
50 55 60 65 70 75 80 85 90 95 192
tcg tat ttt gac tgt aga atg atg ttt cca gaa atg tgt ggt tgg cga
Ser Tyr Phe Asp Cys Arg Met Met Phe Pro Glu Met Cys Gly Trp Arg
ggc tgatgctcca ggaccctctg aaccacgacg t 226
Gly
65

<210> 91
<211> 65
<212> PRT
<213> Conus sulcatus

<400> 91
Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser
1 5 10 15
Phe Asn Ser Asp Arg Asp Pro Ala Leu Gly Gly Arg Asn Ala Ala Ala
20 25 30
Lys Ala Ser Asp Lys Ile Ala Ser Thr Leu Lys Arg Arg Gly Cys Cys
35 40 45
Ser Tyr Phe Asp Cys Arg Met Met Phe Pro Glu Met Cys Gly Trp Arg
50 55 60
Gly
65

<210> 92
<211> 226
<212> DNA
<213> Conus sulcatus

<220>
<221> CDS
<222> (1)..(195)

<400> 92
atg ttc acc gtg ttt ctg ttg gtt gtc ttg gca acc acc gtc gtt tcc 48
Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser
1 5 10 15
ttc aat tca gat cgt gat cca gca tta ggt ggc agg aat gct gca gcc 96
Phe Asn Ser Asp Arg Asp Pro Ala Leu Gly Gly Arg Asn Ala Ala Ala
20 25 30
ata gcg tct gac aag atc gct tcg acc ctc agg aga gga gga tgc tgt 144
Ile Ala Ser Asp Lys Ile Ala Ser Thr Leu Arg Arg Gly Gly Cys Cys
35 40 45
tct ttt cct gcc tgt aga aag tat cgt cca gaa atg tgt ggt gga cga 192

Ser Phe Pro Ala Cys Arg Lys Tyr Arg Pro Glu Met Cys Gly Gly Arg
 50 55 60

cgc ttagtgcctcca ggaccctctg aaccacgacg t
 Arg
 65

226

<210> 93
<211> 65
<212> PRT
<213> Conus sulcatus

<400> 93
Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser
 1 5 10 15

Phe Asn Ser Asp Arg Asp Pro Ala Leu Gly Gly Arg Asn Ala Ala Ala
 20 25 30

Ile Ala Ser Asp Lys Ile Ala Ser Thr Leu Arg Arg Gly Gly Cys Cys
 35 40 45

Ser Phe Pro Ala Cys Arg Lys Tyr Arg Pro Glu Met Cys Gly Gly Arg
 50 55 60

Arg
 65

<210> 94
<211> 211
<212> DNA
<213> Conus sulcatus

<220>
<221> CDS
<222> (1)..(180)

<400> 94
atg ttc acc gtg ttt ctg ttg gtt gtc ttg gca acc acc gtc gtt tcc 48
Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser
 1 5 10 15

ttc act tca gat cat gaa tct gat cgc ggt gat gcc caa acc atc caa 96
Phe Thr Ser Asp His Glu Ser Asp Arg Gly Asp Ala Gln Thr Ile Gln
 20 25 30

gaa gtg ttt gag atg ttc gct ctg gac agc gat gga tgc tgt tgg cat 144
Glu Val Phe Glu Met Phe Ala Leu Asp Ser Asp Gly Cys Cys Trp His
 35 40 45

cct gct tgt ggc aga cac tat tgt ggt cga aga cgc ttagtgcctcca 190
Pro Ala Cys Gly Arg His Tyr Cys Gly Arg Arg Arg
 50 55 60

ggaccctctg aaccacgacg t 211

<210> 95
<211> 60
<212> PRT
<213> Conus sulcatus

<400> 95
 Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser
 1 .
 5 .
 10 .
 15 .
 Phe Thr Ser Asp His Glu Ser Asp Arg Gly Asp Ala Gln Thr Ile Gln
 20 .
 25 .
 30 .
 Glu Val Phe Glu Met Phe Ala Leu Asp Ser Asp Gly Cys Cys Trp His
 35 .
 40 .
 45 .
 Pro Ala Cys Gly Arg His Tyr Cys Gly Arg Arg Arg
 50 .
 55 .
 60 .

<210> 96
<211> 202
<212> DNA
<213> Conus sulcatus

<220>
<221> CDS
<222> (1)..(195)

<400> 96
 atg ttc acc gtg ttt ctg ttg gtt gtc ttg gca acc acc gtc gtt tcc 48
 Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser
 1 .
 5 .
 10 .
 15 .
 ttc aat tca gat cgt gat cca gca tta ggt ggc agg aat gct gca gcc 96
 Phe Asn Ser Asp Arg Asp Pro Ala Leu Gly Gly Arg Asn Ala Ala Ala
 20 .
 25 .
 30 .
 ata gcg tct gac aag atc gct tcg acc ctc agg aga gga gga tgc tgt 144
 Ile Ala Ser Asp Lys Ile Ala Ser Thr Leu Arg Arg Gly Gly Cys Cys
 35 .
 40 .
 45 .
 tct ttt gct gcc tgt aga aag tat cgt cca gaa atg tgt ggt gga cga 192
 Ser Phe Ala Ala Cys Arg Lys Tyr Arg Pro Glu Met Cys Gly Gly Arg
 50 .
 55 .
 60 .

cgc tgatgct 202
Arg
65 .

<210> 97
<211> 65
<212> PRT
<213> Conus sulcatus

<400> 97
 Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser
 1 .
 5 .
 10 .
 15 .
 Phe Asn Ser Asp Arg Asp Pro Ala Leu Gly Gly Arg Asn Ala Ala Ala
 20 .
 25 .
 30 .
 Ile Ala Ser Asp Lys Ile Ala Ser Thr Leu Arg Arg Gly Gly Cys Cys
 35 .
 40 .
 45 .
 Ser Phe Ala Ala Cys Arg Lys Tyr Arg Pro Glu Met Cys Gly Gly Arg
 50 .
 55 .
 60 .

Arg

65

<210> 98
<211> 220
<212> DNA
<213> Conus sulcatus

<220>
<221> CDS
<222> (1)..(189)

<400> 98
atg ttc acc gtg ttt ctg ttg gtt ctc ttg gca acc acc gtc gtt tcc 48
Met Phe Thr Val Phe Leu Leu Val Leu Leu Ala Thr Thr Val Val Ser
1 5 10 15
ttc aat tca gat cgt gca tta ggt ggc agg aat gct gca gcc aaa gcg 96
Phe Asn Ser Asp Arg Ala Leu Gly Gly Arg Asn Ala Ala Ala Lys Ala
20 25 30
tct gac aag atc ctt tcg aac ctc agg aga gga gga tgc tgt ttt cat 144
Ser Asp Lys Ile Leu Ser Asn Leu Arg Arg Gly Gly Cys Cys Phe His
35 40 45
cct gtc tgt tac atc aat ctt cta gaa atg tgt cgt caa cga ggc 189
Pro Val Cys Tyr Ile Asn Leu Leu Glu Met Cys Arg Gln Arg Gly
50 55 60
tgatcgcca ggaccctctg aaccacgacg t 220

<210> 99
<211> 63
<212> PRT
<213> Conus sulcatus

<400> 99
Met Phe Thr Val Phe Leu Leu Val Leu Leu Ala Thr Thr Val Val Ser
1 5 10 15
Phe Asn Ser Asp Arg Ala Leu Gly Gly Arg Asn Ala Ala Ala Lys Ala
20 25 30
Ser Asp Lys Ile Leu Ser Asn Leu Arg Arg Gly Gly Cys Cys Phe His
35 40 45
Pro Val Cys Tyr Ile Asn Leu Leu Glu Met Cys Arg Gln Arg Gly
50 55 60

<210> 100
<211> 208
<212> DNA
<213> Conus consors

<220>
<221> CDS
<222> (1)..(177)

<400> 100
atg ttc acc gtg ttt ctg ttg gtt gtc ttg aca acc act gtc gtt tcc 48
Met Phe Thr Val Phe Leu Leu Val Val Leu Thr Thr Val Val Ser
1 5 10 15

41

ttc cct tca gat agt gca tct gat gtc agg gat gac gaa gcc aaa gac 96
Phe Pro Ser Asp Ser Ala Ser Asp Val Arg Asp Asp Glu Ala Lys Asp
20 25 30

gaa agg tct gac atg tac aaa tcg aaa cgg aat gga cgc tgt tgc cat 144
Glu Arg Ser Asp Met Tyr Lys Ser Lys Arg Asn Gly Arg Cys Cys His
35 40 45

cct gcc tgt ggc aaa cac ttt agt tgt gga cgc tgatgctcca ggaccctctg 197
Pro Ala Cys Gly Lys His Phe Ser Cys Gly Arg
50 55

aaccacgacg t 208

<210> 101
<211> 59
<212> PRT
<213> Conus consors

<400> 101
Met Phe Thr Val Phe Leu Leu Val Val Leu Thr Thr Thr Val Val Ser
1 5 10 15

Phe Pro Ser Asp Ser Ala Ser Asp Val Arg Asp Asp Glu Ala Lys Asp
20 25 30

Glu Arg Ser Asp Met Tyr Lys Ser Lys Arg Asn Gly Arg Cys Cys His
35 40 45

Pro Ala Cys Gly Lys His Phe Ser Cys Gly Arg
50 55

<210> 102
<211> 219
<212> DNA
<213> Conus stercusmuscarum

<220>
<221> CDS
<222> (1)..(189)

<400> 102
atg ttc acc gtg ttt ctg ttg gtt gtc ttg gca acc act gtc gtt tcc 48
Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser
1 5 10 15

tcc cct tca gat cgt gca tct gat ggc agg aat gcc gca gcc aac gag 96
Ser Pro Ser Asp Arg Ala Ser Asp Gly Arg Asn Ala Ala Ala Asn Glu
20 25 30

aaa gcg tct gac gtg atc gcg ctg gcc ctc aag gga tgc tgt tcc aac 144
Lys Ala Ser Asp Val Ile Ala Leu Ala Leu Lys Gly Cys Cys Ser Asn
35 40 45

cct gtc tgt cac ctg gag cat tca aac atg tgt ggt aga aga cgc 189
Pro Val Cys His Leu Glu His Ser Asn Met Cys Gly Arg Arg Arg
50 55 60

tgatgctcca ggaccctctg aaccacgacg 219

<210> 103

<211> 63
<212> PRT
<213> Conus stercusmuscarum

<400> 103
Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser
1 5 10 15
Ser Pro Ser Asp Arg Ala Ser Asp Gly Arg Asn Ala Ala Asn Glu
20 25 30
Lys Ala Ser Asp Val Ile Ala Leu Ala Leu Lys Gly Cys Cys Ser Asn
35 40 45
Pro Val Cys His Leu Glu His Ser Asn Met Cys Gly Arg Arg Arg
50 55 60

<210> 104
<211> 248
<212> DNA
<213> Conus betulinus

<220>
<221> CDS
<222> (1)..(180)

<400> 104
atg ttc tcc gtg ttt ctg ttg gtt gtc ttg gca acc act gtc gtt tcc 48
Met Phe Ser Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser
1 5 10 15
tcc act tca ggt ggt gca tct ggt ggc agg aag gct gca gcc aaa gcg 96
Ser Thr Ser Gly Gly Ala Ser Gly Gly Arg Lys Ala Ala Ala Lys Ala
20 25 30
tct aac cgg atc gct ctg acc gtc agg agt gca aca tgc tgt aat tat 144
Ser Asn Arg Ile Ala Leu Thr Val Arg Ser Ala Thr Cys Cys Asn Tyr
35 40 45
cct ccc tgt tac gag act tat cca gaa agt tgt ctg taacgtgaat 190
Pro Pro Cys Tyr Glu Thr Tyr Pro Glu Ser Cys Leu
50 55 60
catccagagc tttgtggctg aagacactga tgctccagga ccctctgaac cacgacgt 248

<210> 105
<211> 60
<212> PRT
<213> Conus betulinus

<400> 105
Met Phe Ser Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser
1 5 10 15
Ser Thr Ser Gly Gly Ala Ser Gly Gly Arg Lys Ala Ala Ala Lys Ala
20 25 30
Ser Asn Arg Ile Ala Leu Thr Val Arg Ser Ala Thr Cys Cys Asn Tyr
35 40 45
Pro Pro Cys Tyr Glu Thr Tyr Pro Glu Ser Cys Leu
50 55 60

<210> 106
 <211> 223
 <212> DNA
 <213> Conus betulinus

<220>
 <221> CDS
 <222> (1)..(183)

<400> 106

atg ttc acc gtg ttt ctg ttg gtc ttg gca acc act gtg gtt tcc	48
Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser	
1 5 10 15	

ttc act tca ggt cgt gca ttt cgt ggc agg aat cgc gca gcc gac gac

Phe Thr Ser Gly Arg Ala Phe Arg Gly Arg Asn Arg Ala Ala Asp Asp	96
20 25 30	

aaa agg tct gac ctg gcc gct ctg agc gtc agg gga gga tgc tgt tcc

Lys Arg Ser Asp Leu Ala Ala Leu Ser Val Arg Gly Gly Cys Cys Ser	144
35 40 45	

cat cct gcc tgt gcg gtg aat cat cca gag ctt tgt ggc tgaagacgct

His Pro Ala Cys Ala Val Asn His Pro Glu Leu Cys Gly	193
50 55 60	

gatgccccag gaccctctga accacgacgt

	223
--	-----

<210> 107
 <211> 61
 <212> PRT
 <213> Conus betulinus

<400> 107

Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser	
1 5 10 15	

Phe Thr Ser Gly Arg Ala Phe Arg Gly Arg Asn Arg Ala Ala Asp Asp

20 25 30	
---	--

Lys Arg Ser Asp Leu Ala Ala Leu Ser Val Arg Gly Gly Cys Cys Ser

35 40 45	
---	--

His Pro Ala Cys Ala Val Asn His Pro Glu Leu Cys Gly

50 55 60	
---	--

<210> 108
 <211> 248
 <212> DNA
 <213> Conus betulinus

<220>
 <221> CDS
 <222> (1)..(180)

<400> 108

atg ttc acc gtg ttt ctg ttg gtc ttg gca acc act gtc gtt tcc	48
Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser	
1 5 10 15	

ttc act tca ggt cgt gca tct ggt ggc agg aat gct gca gcc aaa gcg

	96
--	----

Phe Thr Ser Gly Arg Ala Ser Gly Gly Arg Asn Ala Ala Ala Lys Ala
 20 25 30

tct aac cgg atc gct atg gcc atc agc agt gga gca tgc tgt gca tat 144
 Ser Asn Arg Ile Ala Met Ala Ile Ser Ser Gly Ala Cys Cys Ala Tyr
 35 40 45

cct ccc tgt ttc gag gct tat cca gaa aga tgt ctg taacgtgaat 190
 Pro Pro Cys Phe Glu Ala Tyr Pro Glu Arg Cys Leu
 50 55 60

catccagacc tttgtggctg aagacgctga tgccccagga ccctctgaac cacgacgt 248

<210> 109
 <211> 60
 <212> PRT
 <213> Conus betulinus

<400> 109
 Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser
 1 5 10 15

Phe Thr Ser Gly Arg Ala Ser Gly Gly Arg Asn Ala Ala Ala Lys Ala
 20 25 30

Ser Asn Arg Ile Ala Met Ala Ile Ser Ser Gly Ala Cys Cys Ala Tyr
 35 40 45

Pro Pro Cys Phe Glu Ala Tyr Pro Glu Arg Cys Leu
 50 55 60

<210> 110
 <211> 223
 <212> DNA
 <213> Conus betulinus

<220>
 <221> CDS
 <222> (1)..(192)

<400> 110
 atg ttc acc gtg ttt ctg ttg gtc ttg gca acc act gtc gtt tcc 48
 Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser
 1 5 10 15

ttc act tca gat cgt gca ttt cgt ggc agg aat tcc gca gcc aac gac 96
 Phe Thr Ser Asp Arg Ala Phe Arg Gly Arg Asn Ser Ala Ala Asn Asp
 20 25 30

aaa agg tct gac ctg gcc gct ctg agc gtc agg aga gga tgc tgc tcc 144
 Lys Arg Ser Asp Leu Ala Ala Leu Ser Val Arg Arg Gly Cys Cys Ser
 35 40 45

cat ccc gcc tgt agc gtg aat cat cca gag ctt tgt ggt aga aga cgc 192
 His Pro Ala Cys Ser Val Asn His Pro Glu Leu Cys Gly Arg Arg Arg
 50 55 60

tgatccccca ggaccctctg aaccacgacg t 223

<210> 111
 <211> 64

<212> PRT

<213> Conus betulinus

<400> 111

Met	Phe	Thr	Val	Phe	Leu	Leu	Val	Val	Leu	Ala	Thr	Thr	Val	Val	Ser
1				5					10					15	

Phe	Thr	Ser	Asp	Arg	Ala	Phe	Arg	Gly	Arg	Asn	Ser	Ala	Ala	Asn	Asp
				20				25					30		

Lys	Arg	Ser	Asp	Leu	Ala	Ala	Leu	Ser	Val	Arg	Arg	Gly	Cys	Cys	Ser
				35				40				45			

His	Pro	Ala	Cys	Ser	Val	Asn	His	Pro	Glu	Leu	Cys	Gly	Arg	Arg	Arg
				50			55				60				

<210> 112

<211> 248

<212> DNA

<213> Conus betulinus

<220>

<221> CDS

<222> (1)..(180)

<400> 112

atg	tcc	acc	gtg	ttt	ctg	ttg	gtt	gtc	ttg	gca	acc	act	gtc	gtt	tcc
Met		Phe	Thr	Val	Phe	Leu	Leu	Val	Val	Ala	Thr	Thr	Val	Val	Ser
1				5					10					15	

ttc	act	tca	ggg	cgt	gca	tct	ggg	agg	aat	gct	gca	gcc	aaa	gcg	
Phe		Thr	Ser	Gly	Arg	Ala	Ser	Gly	Gly	Arg	Asn	Ala	Ala	Lys	Ala
				20				25				30			

tct	aac	ccg	atc	gct	ctg	atc	gtc	agg	aat	gca	gaa	tgc	tgt	tat	tat
Ser	Asn	Arg	Ile	Ala	Leu	Ile	Val	Arg	Asn	Ala	Glu	Cys	Cys	Tyr	Tyr
			35				40					45			

cct	ccc	tgt	tac	gag	gct	tat	cca	gaa	att	tgt	ctg	taacgtgaat		190
Pro	Pro	Cys	Tyr	Glu	Ala	Tyr	Pro	Glu	Ile	Cys	Leu			
			50			55			60					

catccagacc	tttgtggctg	aagaccctga	tgctccagga	ccctctgaac	cacgacgt		248
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<210> 113

<211> 60

<212> PRT

<213> Conus betulinus

<400> 113

Met	Phe	Thr	Val	Phe	Leu	Leu	Val	Val	Leu	Ala	Thr	Thr	Val	Val	Ser
1				5					10					15	

Phe	Thr	Ser	Gly	Arg	Ala	Ser	Gly	Gly	Arg	Asn	Ala	Ala	Lys	Ala
				20				25				30		

Ser	Asn	Arg	Ile	Ala	Leu	Ile	Val	Arg	Asn	Ala	Glu	Cys	Cys	Tyr	Tyr
			35				40				45				

Pro	Pro	Cys	Tyr	Glu	Ala	Tyr	Pro	Glu	Ile	Cys	Leu		
			50			55			60				

<210> 114
<211> 207
<212> DNA
<213> Conus pennaceus

<220>
<221> CDS
<222> (1)..(168)

<400> 114
atg ttc acc gtg ttt ctg ttg gtc ttg gca acc acc gtc att tcc 48
Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Ile Ser
1 5 10 15

ttc act tca gat cgt gca tct gat ggc ggg aat gcc gca gcg tct gac 96
Phe Thr Ser Asp Arg Ala Ser Asp Gly Gly Asn Ala Ala Ala Ser Asp
20 25 30

ctg atc gct ctg acc atc aag gga tgc tgt tct cat cct ccc tgt gcc 144
Leu Ile Ala Leu Thr Ile Lys Gly Cys Cys Ser His Pro Pro Cys Ala
35 40 45

atg aat aat cca gac tat tgt ggt tgacgacgct gatgctccag gaccctctga 198
Met Asn Asn Pro Asp Tyr Cys Gly
50 55

accacgacg 207

<210> 115
<211> 56
<212> PRT
<213> Conus pennaceus

<400> 115
Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Ile Ser
1 5 10 15

Phe Thr Ser Asp Arg Ala Ser Asp Gly Gly Asn Ala Ala Ala Ser Asp
20 25 30

Leu Ile Ala Leu Thr Ile Lys Gly Cys Cys Ser His Pro Pro Cys Ala
35 40 45

Met Asn Asn Pro Asp Tyr Cys Gly
50 55

<210> 116
<211> 207
<212> DNA
<213> Conus pennaceus

<220>
<221> CDS
<222> (1)..(168)

<400> 116
atg ttc acc gtg ttt ctg ttg gtc ttg gca acc acc gtc gtt tcc 48
Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser
1 5 10 15

ttc act tca gat cgt gca tct gat ggc ggg aat gcc gca atg tct gac 96
Phe Thr Ser Asp Arg Ala Ser Asp Gly Gly Asn Ala Ala Met Ser Asp

20

25

30

ctg atc gct ctg acc atc aag gga tgc tgt tct cat cct ccc tgt ttc 144
 Leu Ile Ala Leu Thr Ile Lys Gly Cys Cys Ser His Pro Pro Cys Phe
 35 40 45

ctg aat aat cca gac tat tgt ggt tgacgacgct gatgctccag gaccctctga 198
 Leu Asn Asn Pro Asp Tyr Cys Gly
 50 55

accacgacg 207

<210> 117
 <211> 56
 <212> PRT
 <213> Conus pennaceus

<400> 117
 Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser
 1 5 10 15

Phe Thr Ser Asp Arg Ala Ser Asp Gly Gly Asn Ala Ala Met Ser Asp
 20 25 30

Leu Ile Ala Leu Thr Ile Lys Gly Cys Cys Ser His Pro Pro Cys Phe
 35 40 45

Leu Asn Asn Pro Asp Tyr Cys Gly
 50 55

<210> 118
 <211> 210
 <212> DNA
 <213> Conus stercusmuscarum

<220>
 <221> CDS
 <222> (1)..(171)

<400> 118
 atg ttc acc gtg ttt ctg ttg gtt gtc ttg gca acc act gtc gtt tcc 48
 Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser
 1 5 10 15

ttc cct tca gat cgt gaa tct gat ggc gcg aat gac gaa gcc cgcc acc 96
 Phe Pro Ser Asp Arg Glu Ser Asp Gly Ala Asn Asp Glu Ala Arg Thr
 20 25 30

gac gag cct gag gag cac gga ccg gac agg aat gga tgc tgt agg aat 144
 Asp Glu Pro Glu Glu His Gly Pro Asp Arg Asn Gly Cys Cys Arg Asn
 35 40 45

cct gcc tgt gag agc cac aga tgt ggt tgacgacgct gatgctccag 191
 Pro Ala Cys Glu Ser His Arg Cys Gly
 50 55

gaccctctga accacgacg 210

<210> 119
 <211> 57
 <212> PRT

<213> Conus stercusmuscarum

<400> 119
 Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser
 1 5 10 15
 Phe Pro Ser Asp Arg Glu Ser Asp Gly Ala Asn Asp Glu Ala Arg Thr
 20 25 30
 Asp Glu Pro Glu Glu His Gly Pro Asp Arg Asn Gly Cys Cys Arg Asn
 35 40 45
 Pro Ala Cys Glu Ser His Arg Cys Gly
 50 55

<210> 120

<211> 210

<212> DNA

<213> Conus circumcisus

<220>
<221> CDS
<222> (1)..(180)

<400> 120
 atg ttc acc gtg ttt ctg ttg gtt gtc ttg gca acc act gtc gtt tcc 48
 Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser
 1 5 10 15
 ttc cct tca gat cgt gca tct gat ggc agg aat gcc gca gcc agc gac 96
 Phe Pro Ser Asp Arg Ala Ser Asp Gly Arg Asn Ala Ala Ser Asp
 20 25 30
 aga gcg tct gac gcg gcc cac cag gga tgc tgt tcc aac cct gtc tgt 144
 Arg Ala Ser Asp Ala Ala His Gln Gly Cys Cys Ser Asn Pro Val Cys
 35 40 45
 cac gtg gaa cat cca gaa ctt tgt cgt aga aga cgc tgatgctcca 190
 His Val Glu His Pro Glu Leu Cys Arg Arg Arg Arg.
 50 55 60
 ggaccctctg aaccacgacg 210

<210> 121

<211> 60

<212> PRT

<213> Conus circumcisus

<400> 121
 Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser
 1 5 10 15
 Phe Pro Ser Asp Arg Ala Ser Asp Gly Arg Asn Ala Ala Ser Asp
 20 25 30
 Arg Ala Ser Asp Ala Ala His Gln Gly Cys Cys Ser Asn Pro Val Cys
 35 40 45
 His Val Glu His Pro Glu Leu Cys Arg Arg Arg Arg
 50 55 60

<210> 122
<211> 213
<212> DNA
<213> Conus circumcisus

<220>
<221> CDS
<222> (1)..(174)

<400> 122

atg	tgc	acc	gtg	ttt	ctg	ttg	gtt	gtc	ttg	gca	acc	act	gtc	gtt	tcc	48
Met	Phe	Thr	Val	Phe	Leu	Leu	Val	Val	Leu	Ala	Thr	Thr	Val	Val	Ser	
1	5							10						15		

ttc cct tca aat cgt gaa tct gat ggc gcg aat gcc gaa gtc cgc acc 96

Phe	Pro	Ser	Asn	Arg	Glu	Ser	Asp	Gly	Ala	Asn	Ala	Glu	Val	Arg	Thr	
20								25				30				

gac gag cct gag gag cac gac gaa ctg ggc ggg aat gga tgc tgt ggg 144

Asp	Glu	Pro	Glu	Glu	His	Asp	Glu	Leu	Gly	Gly	Asn	Gly	Cys	Cys	Gly	
35							40				45					

aat cct gac tgt acg agc cac agt tgt gat tgacgacgct gatgctccag 194

Asn	Pro	Asp	Cys	Thr	Ser	His	Ser	Cys	Asp						
50							55								

gaccctctga accacgacg 213

<210> 123
<211> 58
<212> PRT
<213> Conus circumcisus

<400> 123

Met	Phe	Thr	Val	Phe	Leu	Leu	Val	Val	Leu	Ala	Thr	Thr	Val	Val	Ser	
1	5							10				15				

Phe Pro Ser Asn Arg Glu Ser Asp Gly Ala Asn Ala Glu Val Arg Thr 20 25 30

Asp Glu Pro Glu Glu His Asp Glu Leu Gly Gly Asn Gly Cys Cys Gly 35 40 45

Asn Pro Asp Cys Thr Ser His Ser Cys Asp 50 55

<210> 124
<211> 207
<212> DNA
<213> Conus episcopatus

<220>
<221> CDS
<222> (1)..(168)

<400> 124

atg	tgc	acc	gtg	ttt	ctg	ttg	gtt	gtc	ttg	gca	acc	acc	gtc	gtt	tcc	48
Met	Phe	Thr	Val	Phe	Leu	Leu	Val	Val	Leu	Ala	Thr	Thr	Val	Val	Ser	
1	5							10					15			

ttc act tca gat cgt gca tct gat agc agg aag gac gca gcg tct ggc 96

Phe	Thr	Ser	Asp	Arg	Ala	Ser	Asp	Ser	Arg	Lys	Asp	Ala	Ala	Ser	Gly	
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	--

20

25

30

ctg atc gct ctg acc atc aag gga tgc tgt tct gat cct cgc tgt aac 144
 Leu Ile Ala Leu Thr Ile Lys Gly Cys Cys Ser Asp Pro Arg Cys Asn
 35 40 45

atg aat aat cca gac tat tgt ggt tgacgacgct gatgctccag gaccctctga 198
 Met Asn Asn Pro Asp Tyr Cys Gly
 50 55

accacgacg 207

<210> 125
 <211> 56
 <212> PRT
 <213> Conus episcopatus

<400> 125
 Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser
 1 5 10 15

Phe Thr Ser Asp Arg Ala Ser Asp Ser Arg Lys Asp Ala Ala Ser Gly
 20 25 30

Leu Ile Ala Leu Thr Ile Lys Gly Cys Cys Ser Asp Pro Arg Cys Asn
 35 40 45

Met Asn Asn Pro Asp Tyr Cys Gly
 50 55

<210> 126
 <211> 213
 <212> DNA
 <213> Conus sponsalis

<220>
 <221> CDS
 <222> (1)..(174)

<400> 126
 atg tcc acc gtg ttt ctg ttg gtt gtc ctc gca acc acc gtc gtt tcc 48
 Met Ser Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser
 1 5 10 15

ttc act gta gat cgt gca tct gat ggc agg gat gtc gca atc gac gac 96
 Phe Thr Val Asp Arg Ala Ser Asp Gly Arg Asp Val Ala Ile Asp Asp
 20 25 30

aga ttg gtg tct ctc cct cag atc gcc cat gct gac tgt tgt tcc gat 144
 Arg Leu Val Ser Leu Pro Gln Ile Ala His Ala Asp Cys Cys Ser Asp
 35 40 45

cct gcc tgc aag cag acg ccc ggt tgt cgt taaagacgct gctgctccag 194
 Pro Ala Cys Lys Gln Thr Pro Gly Cys Arg
 50 55

gaccctctga accacgacg 213

<210> 127
 <211> 58
 <212> PRT

<213> Conus sponsalis

<400> 127
 Met Ser Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser
 1 5 10 15
 Phe Thr Val Asp Arg Ala Ser Asp Gly Arg Asp Val Ala Ile Asp Asp
 20 25 30
 Arg Leu Val Ser Leu Pro Gln Ile Ala His Ala Asp Cys Cys Ser Asp
 35 40 45
 Pro Ala Cys Lys Gln Thr Pro Gly Cys Arg
 50 55

<210> 128
 <211> 221
 <212> DNA
 <213> Conus sponsalis

<220>
 <221> CDS
 <222> (1)..(168)

<400> 128
 atg ttc acc gtg ttt ctg ttg gtt gtc ttg gca acc acc gtc gct tcc 48
 Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Ala Ser
 1 5 10 15
 ttc att atc gat gat cca tct gat ggc agg aat att gca gtc gac gac 96
 Phe Ile Ile Asp Asp Pro Ser Asp Gly Arg Asn Ile Ala Val Asp Asp
 20 25 30
 aga ggg ctt ttc tct acg ctc ttc cat gct gat tgc tgt gaa aat cct 144
 Arg Gly Leu Phe Ser Thr Leu Phe His Ala Asp Cys Cys Glu Asn Pro
 35 40 45
 gcc tgt aga cac acg cag ggt tgt tgatcttgc tcttcaaaga cactgctggc 198
 Ala Cys Arg His Thr Gln Gly Cys
 50 55
 ccaggaccct ctgaaccacg acg 221

<210> 129
 <211> 56
 <212> PRT
 <213> Conus sponsalis

<400> 129
 Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Ala Ser
 1 5 10 15
 Phe Ile Ile Asp Asp Pro Ser Asp Gly Arg Asn Ile Ala Val Asp Asp
 20 25 30
 Arg Gly Leu Phe Ser Thr Leu Phe His Ala Asp Cys Cys Glu Asn Pro
 35 40 45
 Ala Cys Arg His Thr Gln Gly Cys
 50 55

<210> 130
<211> 220
<212> DNA
<213> Conus dalli

<220>
<221> CDS
<222> (1)..(180)

<400> 130 48
atg ttc acc gtg ttt ctg ttg gtc ttg gca acc acc gtc gtt tcc
Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser
1 5 10 15
ttc act tca gat cgt gca ttt cgt ggc agg aat gcc gca gcc aaa gag 96
Phe Thr Ser Asp Arg Ala Phe Arg Gly Arg Asn Ala Ala Ala Lys Glu
20 25 30
tct ggc ctg gtc ggt ctg acc gac aag acg cga gga tgc tgt tct cat 144
Ser Gly Leu Val Gly Leu Thr Asp Lys Thr Arg Gly Cys Cys Ser His
35 40 45
cct gcc tgt aac gta gat cat cca gaa att tgt ggt tgaagacgct 190
Pro Ala Cys Asn Val Asp His Pro Glu Ile Cys Gly
50 55 60
gatgctccag gaccctctga accacgacgt 220

<210> 131
<211> 60
<212> PRT
<213> Conus dalli

<400> 131
Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser 48
1 5 10 15
Phe Thr Ser Asp Arg Ala Phe Arg Gly Arg Asn Ala Ala Ala Lys Glu
20 25 30
Ser Gly Leu Val Gly Leu Thr Asp Lys Thr Arg Gly Cys Cys Ser His
35 40 45
Pro Ala Cys Asn Val Asp His Pro Glu Ile Cys Gly
50 55 60

<210> 132
<211> 208
<212> DNA
<213> Conus dalli

<220>
<221> CDS
<222> (1)..(177)

<400> 132 48
atg ttc acc gtg ttt ctg ttg gtc ttg gca acc acc gtc gtt tcc
Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser
1 5 10 15
ttc act tca gat ggt gca tct gat gac agg aaa gcc gct gcg tct gac 96
Phe Thr Ser Asp Gly Ala Ser Asp Asp Arg Lys Ala Ala Ala Ser Asp

20

25

30

ctg atc act ctg acc atc aag gga tgc tgt tct cgt cct ccc tgt atc 144
 Leu Ile Thr Leu Thr Ile Lys Gly Cys Cys Ser Arg Pro Pro Cys Ile
 35 40 45

gcg aat aat cca gac ttg tgt ggt cga cga cgc tgatgctcca ggaccctctg 197
 Ala Asn Asn Pro Asp Leu Cys Gly Arg Arg Arg
 50 55

aaccacgacg t 208

<210> 133
 <211> 59
 <212> PRT
 <213> Conus dalli

<400> 133
 Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser
 1 5 10 15

Phe Thr Ser Asp Gly Ala Ser Asp Asp Arg Lys Ala Ala Ala Ser Asp
 20 25 30

Leu Ile Thr Leu Thr Ile Lys Gly Cys Cys Ser Arg Pro Pro Cys Ile
 35 40 45

Ala Asn Asn Pro Asp Leu Cys Gly Arg Arg Arg
 50 55

<210> 134
 <211> 223
 <212> DNA
 <213> Conus dalli

<220>
 <221> CDS
 <222> (1)...(192)

<400> 134
 atg ttc acc gtg ttt ctg ttg gtc ttg gca acc act gtc gtt tcc 48
 Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser
 1 5 10 15

tcc act tca ggt cgt cgt gca ttt cat ggc agg aat gcc gca gcc aaa 96
 Ser Thr Ser Gly Arg Arg Ala Phe His Gly Arg Asn Ala Ala Ala Lys
 20 25 30

gcg tct gga ctg gtc ggt ctg act gac agg aga cca caa tgc tgt agt 144
 Ala Ser Gly Leu Val Gly Leu Thr Asp Arg Arg Pro Gln Cys Cys Ser
 35 40 45

gat cct cgc tgt aac gta ggt cat cca gaa ctt tgt ggt gga aga cgc 192
 Asp Pro Arg Cys Asn Val Gly His Pro Glu Leu Cys Gly Gly Arg Arg
 50 55 60

tgatgctcca ggaccctctg aaccacaacg t 223

<210> 135
 <211> 64
 <212> PRT

<213> Conus dalli

<400> 135
 Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser
 1 5 10 15
 Ser Thr Ser Gly Arg Arg Ala Phe His Gly Arg Asn Ala Ala Ala Lys
 20 25 30
 Ala Ser Gly Leu Val Gly Leu Thr Asp Arg Arg Pro Gln Cys Cys Ser
 35 40 45
 Asp Pro Arg Cys Asn Val Gly His Pro Glu Leu Cys Gly Gly Arg Arg
 50 55 60

<210> 136

<211> 220

<212> DNA

<213> Conus dalli

<220>
<221> CDS
<222> (1)...(189)

<400> 136
 atg ttc acc gtg ttt ctg ttg gtc ttg gca acc act gtc gtt tcc 48
 Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser
 1 5 10 15
 tcc act tca ggt cgt gca ttt cat ggc agg aat gcc gca gcc aaa gcg 96
 Ser Thr Ser Gly Arg Ala Phe His Gly Arg Asn Ala Ala Ala Lys Ala
 20 25 30
 tct ggc ctg gtc ggt ctg acc gac aag agg caa gta tgc tgt agt gat 144
 Ser Gly Leu Val Gly Leu Thr Asp Lys Arg Gln Val Cys Cys Ser Asp
 35 40 45
 cct cgc tgt aac gta ggt cat cca gaa att tgt ggt gga aga cgc 189
 Pro Arg Cys Asn Val Gly His Pro Glu Ile Cys Gly Gly Arg Arg
 50 55 60
 tgatgctcca ggaccctctg aaccacgacg t 220

<210> 137

<211> 63

<212> PRT

<213> Conus dalli

<400> 137
 Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser
 1 5 10 15
 Ser Thr Ser Gly Arg Ala Phe His Gly Arg Asn Ala Ala Ala Lys Ala
 20 25 30
 Ser Gly Leu Val Gly Leu Thr Asp Lys Arg Gln Val Cys Cys Ser Asp
 35 40 45
 Pro Arg Cys Asn Val Gly His Pro Glu Ile Cys Gly Gly Arg Arg
 50 55 60

<210> 138
<211> 208
<212> DNA
<213> Conus achatinus

<220>
<221> CDS
<222> (1)..(180)

<400> 138
atg ttc acc gtg ttt ctg ttg gtc ttg aca acc act gtc gtt tcc 48
Met Phe Thr Val Phe Leu Leu Val Val Leu Thr Thr Thr Val Val Ser
1 5 10 15

ttc cct tca gat agt gca tct ggt ggc agg gat gac gag gcc aaa gac 96
Phe Pro Ser Asp Ser Ala Ser Gly Gly Arg Asp Asp Glu Ala Lys Asp
20 25 30

gaa agg tct gac atg tac gaa ttg aaa cgg aat gga cgc tgt tgc cat 144
Glu Arg Ser Asp Met Tyr Glu Leu Lys Arg Asn Gly Arg Cys Cys His
35 40 45

cct gcc tgt ggt ggc aaa tac gtt aaa tgt gga cgc tcatgctcca 190
Pro Ala Cys Gly Gly Lys Tyr Val Lys Cys Gly Arg
50 55 60

ggaccctctc gaaccacg 208

<210> 139
<211> 60
<212> PRT
<213> Conus achatinus

<400> 139
Met Phe Thr Val Phe Leu Leu Val Val Leu Thr Thr Thr Val Val Ser
1 5 10 15

Phe Pro Ser Asp Ser Ala Ser Gly Gly Arg Asp Asp Glu Ala Lys Asp
20 25 30

Glu Arg Ser Asp Met Tyr Glu Leu Lys Arg Asn Gly Arg Cys Cys His
35 40 45

Pro Ala Cys Gly Gly Lys Tyr Val Lys Cys Gly Arg
50 55 60

<210> 140
<211> 211
<212> DNA
<213> Conus bullatus

<220>
<221> CDS
<222> (1)..(174)

<400> 140
atg ttc acc gtg ttt ctg ttg gtc ttg gca acc act gtc gtt tcc 48
Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser
1 5 10 15

ttc tct aca gat gat gaa tct gat ggc tcg aat gaa gaa ccc agc gcc 96
Phe Ser Thr Asp Asp Glu Ser Asp Gly Ser Asn Glu Glu Pro Ser Ala

20

25

30

gac cag act gcc agg tcc tca atg aac agg gcg cct gga tgc tgt aac 144
 Asp Gln Thr Ala Arg Ser Ser Met Asn Arg Ala Pro Gly Cys Cys Asn
 35 40 45

aat cct gcc tgt gtg aag cac aga tgt gga tgacgctgat gctccaggac 194
 Asn Pro Ala Cys Val Lys His Arg Cys Gly
 50 55

cctctgaacc acgacgt 211

<210> 141
 <211> 58
 <212> PRT
 <213> Conus bullatus

<400> 141
 Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser
 1 5 10 15

Phe Ser Thr Asp Asp Glu Ser Asp Gly Ser Asn Glu Glu Pro Ser Ala
 20 25 30

Asp Gln Thr Ala Arg Ser Ser Met Asn Arg Ala Pro Gly Cys Cys Asn
 35 40 45

Asn Pro Ala Cys Val Lys His Arg Cys Gly
 50 55

<210> 142
 <211> 214
 <212> DNA
 <213> Conus bullatus

<220>
 <221> CDS
 <222> (1)..(177)

<400> 142
 atg ttc acc gtg ttt ctg ttg gtc ttg gca acc act gtc gtt tcc 48
 Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser
 1 5 10 15

tgc tct aca gat gat gaa tct gat ggc tcg aat gaa gaa ccc agc gcc 96
 Phe Ser Thr Asp Asp Glu Ser Asp Gly Ser Asn Glu Glu Pro Ser Ala
 20 25 30

gac cag gct gcc agg tcc gca atg aac agg ccg cct gga tgc tgt aac 144
 Asp Gln Ala Ala Arg Ser Ala Met Asn Arg Pro Pro Gly Cys Cys Asn
 35 40 45

aat cct gcc tgt gtg aag cac aga tgt ggt gga tgacgctgat gctccaggac 197
 Asn Pro Ala Cys Val Lys His Arg Cys Gly Gly
 50 55

cctctgaacc acgacgt 214

<210> 143
 <211> 59
 <212> PRT

<213> Conus bullatus

<400> 143
 Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser
 1 5 10 15
 Phe Ser Thr Asp Asp Glu Ser Asp Gly Ser Asn Glu Glu Pro Ser Ala
 20 25 30
 Asp Gln Ala Ala Arg Ser Ala Met Asn Arg Pro Pro Gly Cys Cys Asn
 35 40 45
 Asn Pro Ala Cys Val Lys His Arg Cys Gly Gly
 50 55

<210> 144
 <211> 208
 <212> DNA
 <213> Conus bullatus

<220>
 <221> CDS
 <222> (1)..(177)

<400> 144
 atg ttc acc gtg ttt ctg ttg gtt gtc ttg gca acc act gtc gtt tcc 48
 Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser
 1 5 10 15
 ttc cct tca gat cgt gac tct gat ggc gcg gat gcc gaa gcc agt gac 96
 Phe Pro Ser Asp Arg Asp Ser Asp Gly Ala Asp Ala Glu Ala Ser Asp
 20 25 30
 gag cct gtt gag ttc gaa agg gac gag aat gga tgc tgt tgg aat cct 144
 Glu Pro Val Glu Phe Glu Arg Asp Glu Asn Gly Cys Cys Trp Asn Pro
 35 40 45
 tcc tgt ccg agg ccc aga tgt aca gga cga cgc taatgctcca ggaccctctg 197
 Ser Cys Pro Arg Pro Arg Cys Thr Gly Arg Arg
 50 55
 aaccacgacg t 208

<210> 145
 <211> 59
 <212> PRT
 <213> Conus bullatus

<400> 145
 Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser
 1 5 10 15
 Phe Pro Ser Asp Arg Asp Ser Asp Gly Ala Asp Ala Glu Ala Ser Asp
 20 25 30
 Glu Pro Val Glu Phe Glu Arg Asp Glu Asn Gly Cys Cys Trp Asn Pro
 35 40 45
 Ser Cys Pro Arg Pro Arg Cys Thr Gly Arg Arg
 50 55

<210> 146
<211> 211
<212> DNA
<213> Conus bullatus

<220>
<221> CDS
<222> (1)...(180)

<400> 146
atg ttc acc gtg ttt ctg ttg gtc ttg aca acc act gtc gtt tcc 48
Met Phe Thr Val Phe Leu Leu Val Val Leu Thr Thr Thr Val Val Ser
1 5 10 15

ttc cct tca gat cgt gca tct gat ggc agg aat gcc gca gcc aac gac 96
Phe Pro Ser Asp Arg Ala Ser Asp Gly Arg Asn Ala Ala Ala Asn Asp
20 25 30

aaa gcg tct gac gtg gtc acg ctg gtc ctc aag gga tgc tgt tcc acc 144
Lys Ala Ser Asp Val Val Thr Leu Val Leu Lys Gly Cys Cys Ser Thr
35 40 45

cct ccc tgt gct gtg ctg tat tgt ggt aga aga cgc tgatgctcca 190
Pro Pro Cys Ala Val Leu Tyr Cys Gly Arg Arg Arg
50 55 60

ggaccctctg aaccacgacg t 211

<210> 147
<211> 60
<212> PRT
<213> Conus bullatus

<400> 147
Met Phe Thr Val Phe Leu Leu Val Val Leu Thr Thr Thr Val Val Ser
1 5 10 15

Phe Pro Ser Asp Arg Ala Ser Asp Gly Arg Asn Ala Ala Ala Asn Asp
20 25 30

Lys Ala Ser Asp Val Val Thr Leu Val Leu Lys Gly Cys Cys Ser Thr
35 40 45

Pro Pro Cys Ala Val Leu Tyr Cys Gly Arg Arg Arg
50 55 60

<210> 148
<211> 212
<212> DNA
<213> Conus distans

<220>
<221> CDS
<222> (1)...(171)

<400> 148
atg ttc acc gtg ttt ctg ttg gtc ttg gca tcc tct gtc acc tta 48
Met Phe Thr Val Phe Leu Leu Val Val Phe Ala Ser Ser Val Thr Leu
1 5 10 15

gat cgt gca tct tat ggc agg tat gcc tca ccc gtc gac aga gcg tct 96
Asp Arg Ala Ser Tyr Gly Arg Tyr Ala Ser Pro Val Asp Arg Ala Ser

20	25	30
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gcc ctg atc gct cag gcc atc ctt cga gat tgc tgc tcc aat cct cct Ala Leu Ile Ala Gln Ala Ile Leu Arg Asp Cys Cys Ser Asn Pro Pro 35 40 45	144
--	-----

tgt gcc cat aat aat cca gac tgt cgt taaagacgct gcttgctcca Cys Ala His Asn Asn Pro Asp Cys Arg 50 55	191
---	-----

ggaccctctg aaccacgacg t	212
-------------------------	-----

<210> 149
<211> 57
<212> PRT
<213> Conus distans

<400> 149 Met Phe Thr Val Phe Leu Leu Val Val Phe Ala Ser Ser Val Thr Leu 1 5 10 15	
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Asp Arg Ala Ser Tyr Gly Arg Tyr Ala Ser Pro Val Asp Arg Ala Ser 20 25 30	
---	--

Ala Leu Ile Ala Gln Ala Ile Leu Arg Asp Cys Cys Ser Asn Pro Pro 35 40 45	
---	--

Cys Ala His Asn Asn Pro Asp Cys Arg 50 55	
--	--

<210> 150
<211> 63
<212> DNA
<213> Conus textile

<220>
<221> CDS
<222> (1)..(60)

<400> 150 gga tgc tgt tct aat cct ccc tgt atc gcg aag aat cca cac atg tgt Gly Cys Cys Ser Asn Pro Pro Cys Ile Ala Lys Asn Pro His Met Cys 1 5 10 15 48	
---	--

ggt gga aga cgc tga Gly Gly Arg Arg 20	63
--	----

<210> 151
<211> 20
<212> PRT
<213> Conus textile

<400> 151 Gly Cys Cys Ser Asn Pro Pro Cys Ile Ala Lys Asn Pro His Met Cys 1 5 10 15	
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Gly Gly Arg Arg 20	
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<210> 152
<211> 220
<212> DNA
<213> Conus consors

<220>
<221> CDS
<222> (1)..(189)

<400> 152
atg ttc acc gtg ttt ctg ttg gtt gtc ttg gca acc act gtc gtt tcc      48
Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser
 1           5           10          15

ttc cct tca gat cgt gca tct gat ggc agg aat gcc gca gcc aac gac      96
Phe Pro Ser Asp Arg Ala Ser Asp Gly Arg Asn Ala Ala Ala Asn Asp
 20          25          30

aaa gcg tct gac gtg atc acg ctg gcc ctc aag gga tgc tgt tcc aac      144
Lys Ala Ser Asp Val Ile Thr Leu Ala Leu Lys Gly Cys Cys Ser Asn
 35          40          45

cct gtc tgt cac ttg gag cat tca aac ctt tgt ggt aga aga cgc      189
Pro Val Cys His Leu Glu His Ser Asn Leu Cys Gly Arg Arg Arg
 50          55          60

tqatactcca qqaccctctq aaccacqacq t

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<210> 153
<211> 63
<212> PRT
<213> Conus consors

<400> 153
Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser
   1           5           10          15

Phe Pro Ser Asp Arg Ala Ser Asp Gly Arg Asn Ala Ala Asn Asp
   20          25          30

Lys Ala Ser Asp Val Ile Thr Leu Ala Leu Lys Gly Cys Cys Ser Asn
   35          40          45

Pro Val Cys His Leu Glu His Ser Asn Leu Cys Gly Arg Arg Arg
   50          55          60

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<210> 154
<211> 15
<212> PRT
<213> Conus musicus
.
<220>
<221> SITE
<222> (4)..(12)
<223> Xaa at residues 4, 11 and 12 is Tyr, nor-Tyr,
mono-halo-Tyr, di-halo-Tyr, O-sulpho-Tyr,
O-phospho-Tyr or nitro-Tyr. Xaa at residue 6 is
Pro or hydroxy-Pro.

<220>
<221> SITE
<222> (9) (15)

<223> Xaa at residues 9, 10 and 15 is Lys, N-methyl-Lys,
 N,N-dimethyl-Lys or N,N,N-trimethyl-Lys; Xaa at
 residue 14 is Trp (D or L) or halo-Trp.

<400> 154
 Gly Cys Cys Xaa Asn Xaa Val Cys Xaa Xaa Xaa Cys Xaa Xaa
 1 5 10 15

<210> 155
 <211> 16
 <212> PRT
 <213> Conus purpurascens

<220>
 <221> SITE
 <222> (1)..(3)
 <223> Xaa at residue 1 is Gln or pyro-Glu; Xaa at
 residue 2 is Glu or gamma-carboxy-Glu; Xaa at
 residues 3 and 9 is Pro or hydroxy-Pro.

<220>
 <221> SITE
 <222> (13)
 <223> Xaa at residue 13 is Lys, N-methyl-Lys,
 N,N-dimethyl-Lys or N,N,N-trimethyl-Lys.

<400> 155
 Xaa Xaa Xaa Gly Cys Cys Arg His Xaa Ala Cys Gly Xaa Asn Arg Cys
 1 5 10 15

<210> 156
 <211> 13
 <212> PRT
 <213> Conus musicus

<220>
 <221> SITE
 <222> (5)..(11)
 <223> Xaa at residues 5 and 11 is Pro or hydroxy-Pro.

<400> 156
 Cys Cys Ala Asp Xaa Asp Cys Arg Phe Arg Xaa Gly Cys
 1 5 10

<210> 157
 <211> 17
 <212> PRT
 <213> Conus musicus

<220>
 <221> SITE
 <222> (4)..(13)
 <223> Xaa at residues 4 and 13 is Tyr, nor-Tyr,
 mono-halo-Tyr, di-halo-Tyr, O-sulpho-Tyr,
 O-phospho-Tyr or nitro-Tyr; Xaa at residues 6 and
 10 is Pro or hydroxy-Pro.

<220>
 <221> SITE
 <222> (9)..(17)
 <223> Xaa at residues 9 and 16 is Trp (D or L) or

halo-Trp; Xaa at residues 11 and 17 is Lys,
 N-methyl-Lys, N,N-dimethyl-Lys or
 N,N,N-trimethyl-Lys.

<400> 157

Gly	Cys	Cys	Xaa	Asn	Xaa	Ser	Cys	Xaa	Xaa	Xaa	Thr	Xaa	Cys	Ser	Xaa
1					5						10				15

Xaa

<210> 158

<211> 13

<212> PRT

<213> Conus musicus

<220>

<221> SITE

<222> (5)..(8)

<223> Xaa at residue 5 is Pro or hydroxy-Pro; Xaa at
 residue 8 is Lys, N-methyl-Lys, N,N-dimethyl-Lys
 or N,N,N-trimethyl-Lys.

<220>

<221> SITE

<222> (9)..(11)

<223> Xaa at residue 9 is Glu or gamma-carboxy-Glu; Xaa
 at residue 11 is Tyr, nor-Tyr, mono-halo-Tyr,
 di-halo-Tyr, O-sulpho-Tyr, O-phospho-Tyr or
 nitro-Tyr.

<400> 158

Cys	Cys	Ser	Asn	Xaa	Thr	Cys	Xaa	Xaa	Thr	Xaa	Gly	Cys
1						5					10	

<210> 159

<211> 13

<212> PRT

<213> Conus musicus

<220>

<221> SITE

<222> (5)..(11)

<223> Xaa at residues 5 and 11 is Pro or hydroxy-Pro;
 Xaa at residue 8 is Lys, N-methyl-Lys,
 N,N-dimethyl-Lys or N,N,N-trimethyl-Lys.

<400> 159

Cys	Cys	Ala	Asn	Xaa	Ile	Cys	Xaa	Asn	Thr	Xaa	Gly	Cys
1						5					10	

<210> 160

<211> 13

<212> PRT

<213> Conus musicus

<220>

<221> SITE

<222> (5)..(8)

<223> Xaa at residue 5 is Pro or hydroxy-Pro; Xaa at
 residue 8 is Lys, N-methyl-Lys, N,N-dimethyl-Lys

or N,N,N-trimethyl-Lys.

<220>
<221> SITE
<222> (9)..(11)
<223> Xaa at residue 9 is Glu or gamma-carboxy-Glu; Xaa at residue 11 is Tyr, mono-halo-Tyr, di-halo-Tyr, O-sulpho-Tyr, O-phospho-Tyr or nitro-Tyr.

<400> 160
Cys Cys Asn Asn Xaa Thr Cys Xaa Xaa Thr Xaa Gly Cys
1 5 10

<210> 161
<211> 13
<212> PRT
<213> Conus musicus

<220>
<221> SITE
<222> (5)..(8)
<223> Xaa at residue 5 is Pro or hydroxy-Pro; Xaa at residue 8 is Lys, N-methyl-Lys, N,N-dimethyl-Lys or N,N,N-trimethyl-Lys.

<220>
<221> SITE
<222> (9)..(11)
<223> Xaa at residue 9 is Glu or gamma-carboxy-Glu; Xaa at residue 11 is Tyr, nor-Tyr, mono-halo-Tyr, di-halo-Tyr, O-sulpho-Tyr, O-phospho-Tyr or nitro-Tyr.

<400> 161
Cys Cys Ser Asn Xaa Val Cys Xaa Xaa Thr Xaa Gly Cys
1 5 10

<210> 162
<211> 17
<212> PRT
<213> Conus betulinus

<220>
<221> SITE
<222> (6)..(14)
<223> Xaa at residue 6 is Tyr, nor-Tyr, mono-halo-Tyr, di-halo-Tyr, O-sulpho-Tyr, O-phospho-Tyr or nitro-Tyr; Xaa at residues 7, 8 and 14 is Pro or hydroxy-Pro.

<220>
<221> SITE
<222> (15)
<223> Xaa at residue 15 is Lys, N-methyl-Lys, N,N-dimethyl-Lys or N,N,N-trimethyl-Lys.

<400> 162
Gly Gly Cys Cys Ser Xaa Xaa Xaa Cys Ile Ala Ser Asn Xaa Xaa Cys
1 5 10 15

Gly

<210> 163

<211> 15

<212> PRT

<213> Conus lividus

<220>

<221> SITE

<222> (6)..(13)

<223> Xaa at residues 6 and 13 is Pro or hydroxy-Pro.

<400> 163

Gly	Cys	Cys	Ser	His	Xaa	Val	Cys	Ser	Ala	Met	Ser	Xaa	Ile	Cys
1					5				10					15

<210> 164

<211> 15

<212> PRT

<213> Conus musicus

<220>

<221> SITE

<222> (4)..(12)

<223> Xaa at residues 4 and 12 is Lys, N-methyl-Lys,
N,N-dimethyl-Lys or N,N,N-trimethyl-Lys; Xaa at
residue 6 is Pro or hydroxy-Pro.

<220>

<221> SITE

<222> (7)..(14)

<223> Xaa at residues 7 and 14 is Tyr, mono-halo-Tyr,
di-halo-Tyr, O-sulpho-Tyr, O-phospho-Tyr or
nitro-Tyr.

<400> 164

Gly	Cys	Cys	Xaa	Asn	Xaa	Xaa	Cys	Gly	Ala	Ser	Xaa	Thr	Xaa	Cys
1					5				10					15

<210> 165

<211> 15

<212> PRT

<213> Conus omaria

<220>

<221> SITE

<222> (5)..(13)

<223> Xaa at residue 5 is Tyr, nor-Tyr, mono-halo-Tyr,
di-halo-Tyr, O-sulpho-Tyr, O-phospho-Tyr or
nitro-Tyr; Xaa at residues 6, 7 and 13 is Pro or
hydroxy-Pro.

<400> 165

Gly	Cys	Cys	Ser	Xaa	Xaa	Xaa	Cys	Phe	Ala	Thr	Asn	Xaa	Asp	Cys
1					5				10					15

<210> 166

<211> 17

<212> PRT

<213> Conus radiatus

<220>

<221> SITE
<222> (6)..(14)
<223> Xaa at residue 6 is Tyr, nor-Tyr, mono-halo-Tyr,
di-halo-Tyr, O-sulpho-Tyr, O-phospho-Tyr or
nitro-Tyr; Xaa at residues 7, 8 and 14 is Pro or
hydroxy-Pro.

<400> 166
Gly Gly Cys Cys Ser Xaa Xaa Xaa Cys Ile Ala Asn Asn Xaa Leu Cys
1 5 10 15

Ala

<210> 167
<211> 17
<212> PRT
<213> Conus radiatus

<220>
<221> SITE
<222> (6)..(14)
<223> Xaa at residue 6 is Tyr, nor-Tyr, mono-halo-Tyr,
di-halo-Tyr, O-sulpho-Tyr, O-phospho-Tyr or
nitro-Tyr; Xaa at residues 7, 8 and 14 is Pro or
hydroxy-Pro.

<400> 167
Gly Gly Cys Cys Ser Xaa Xaa Xaa Cys Ile Ala Asn Asn Xaa Phe Cys
1 5 10 15

Ala

<210> 168
<211> 16
<212> PRT
<213> Conus virgo

<220>
<221> SITE
<222> (6)..(13)
<223> Xaa at residues 6, 7 and 13 is Pro or hydroxy-Pro.

<400> 168
Asp Cys Cys Ser Asn Xaa Xaa Cys Ser Gln Asn Asn Xaa Asp Cys Met
1 5 10 15

<210> 169
<211> 16
<212> PRT
<213> Conus virgo

<220>
<221> SITE
<222> (6)..(13)
<223> Xaa at residues 6, 7 and 13 is Pro or hydroxy-Pro.

<400> 169
Asp Cys Cys Ser Asn Xaa Xaa Cys Ala His Asn Asn Xaa Asp Cys Arg
1 5 10 15

<210> 170
 <211> 20
 <212> PRT
 <213> Conus achatinus

<220>
 <221> SITE
 <222> (1)..(14)
 <223> Xaa at residues 1, 11 and 14 is Glu or
 gamma-carboxy-Glu; Xaa at residue 6 is Pro or
 hydroxy-Pro.

<400> 170
 Xaa Cys Cys Thr Asn Xaa Val Cys His Ala Xaa His Gln Xaa Leu Cys
 1 5 10 15

Ala Arg Arg Arg
 20

<210> 171
 <211> 16
 <212> PRT
 <213> Conus achatinus

<220>
 <221> SITE
 <222> (6)..(10)
 <223> Xaa at residue 6 is Pro or hydroxy-Pro; Xaa at
 residue 11 is Glu or gamma-carboxy-Glu.

<400> 171
 Gly Cys Cys Ser Asn Xaa Val Cys His Leu Xaa His Ser Asn Leu Cys
 1 5 10 15

<210> 172
 <211> 20
 <212> PRT
 <213> Conus achatinus

<220>
 <221> SITE
 <222> (1)..(14)
 <223> Xaa at residues 1, 11 and 14 is Glu or
 gamma-carboxy-Glu; Xaa at residue 6 is Pro or
 hydroxy-Pro.

<400> 172
 Xaa Cys Cys Thr Asn Xaa Val Cys His Val Xaa His Gln Xaa Leu Cys
 1 5 10 15

Ala Arg Arg Arg
 20

<210> 173
 <211> 17
 <212> PRT
 <213> Conus ammiralis

<220>
 <221> SITE

<222> (1)..(15)
<223> Xaa at residue 1 is Gln or pyro-Glu; Xaa at residues 2 and 15 is Glu or gamma-carboxy-Glu; Xaa at residue 6 is Tyr, nor-Tyr, mono-halo-Tyr, di-halo-Tyr, O-sulpho-Tyr, O-phospho-Tyr or

<220>
<221> SITE
<222> (6)..(14)
<223> nitro-Tyr; Xaa at residues 7 and 14 is Pro or hydroxy-Pro.

<400> 173
Xaa Xaa Cys Cys Ser Xaa Xaa Ala Cys Asn Leu Asp His Xaa Xaa Leu
1 5 10 15

Cys

<210> 174
<211> 18
<212> PRT
<213> Conus ammiralis

<220>
<221> SITE
<222> (1)..(15)
<223> Xaa at residues 1, 7 and 14 is Pro or hydroxy-Pro; Xaa at residues 2 and 15 is Glu or gamma-carboxy-Glu.

<400> 174
Xaa Xaa Cys Cys Ser Asp Xaa Arg Cys Asn Ser Thr His Xaa Xaa Leu
1 5 10 15

Cys Gly

<210> 175
<211> 21
<212> PRT
<213> Conus arenatus

<220>
<221> SITE
<222> (7)..(12)
<223> Xaa at residues 7 and 8 is Pro or hydroxy-Pro; Xaa at residue 10 is Trp (D or L) or halo-Trp; Xaa at residues 11 and 12 is Lys, N-methyl-Lys, N,N-dimethyl-Lys or N,N,N-trimethyl-Lys.

<220>
<221> SITE
<222> (13)..(19)
<223> Xaa at residue 13 is Tyr, nor-Tyr, mono-halo-Tyr, di-halo-Tyr, O-sulpho-Tyr, O-phospho-Tyr or nitro-Tyr ; Xaa at residue 19 is Glu or gamma-carboxy-Glu.

<400> 175
Leu Asn Cys Cys Met Ile Xaa Xaa Cys Xaa Xaa Xaa Gly Asp Arg

1

5

10

15

Cys Ser Xaa Val Arg
 20

<210> 176
<211> 22
<212> PRT
<213> Conus arenatus

<220>
<221> SITE
<222> (9)..(20)
<223> Xaa at residue 9 is Pro or hydroxy-Pro; Xaa at residues 12 and 20 is Glu or gamma-carboxy-Glu; Xaa at residue 14 is Tyr, nor-Tyr, mono-halo-Tyr, di-halo-Tyr, O-sulpho-Tyr, O-phospho-Tyr or

<220>
<221> SITE
<222> (9)..(20)
<223> nitro-Tyr.

<400> 176
Ala Phe Gly Cys Cys Asp Leu Ile Xaa Cys Leu Xaa Arg Xaa Gly Asn
 1 5 10 15

Arg Cys Asn Xaa Val His
 20

<210> 177
<211> 21
<212> PRT
<213> Conus arenatus

<220>
<221> SITE
<222> (8)..(16)
<223> Xaa at residue 8 is Pro or hydroxy-Pro; Xaa at residue 10 is Trp (D or L) or halo-Trp; Xaa at residues 12 and 16 is Lys, N-methyl-Lys, N,N-dimethyl-Lys or N,N,N-trimethyl-Lys.

<220>
<221> SITE
<222> (11)..(19)
<223> Xaa at residues 11 and 19 is Glu or gamma-carboxy-Glu; Xaa at residue 13 is Tyr, mono-halo-Tyr, di-halo-Tyr, O-sulpho-Tyr, O-phospho-Tyr or nitro-Tyr.

<400> 177
Leu Gly Cys Cys Asn Val Thr Xaa Cys Xaa Xaa Xaa Gly Asp Xaa
 1 5 10 15

Cys Asn Xaa Val Arg
 20

<210> 178
<211> 20
<212> PRT

P / cont.

<213> Conus arenatus

<220>

<221> SITE

<222> (2)..(14)

<223> Xaa at residue 2 is Glu or gamma-carboxy-Glu; Xaa at residues 7 and 14 is Pro or hydroxy-Pro.

<400> 178

Asp	Xaa	Cys	Cys	Ser	Asn	Xaa	Ala	Cys	Arg	Val	Asn	Asn	Xaa	His	Val
1				5					10					15	

Cys Arg Arg Arg
20

<210> 179

<211> 21

<212> PRT

<213> Conus arenatus

<220>

<221> SITE

<222> (7)..(13)

<223> Xaa at residue 7 is Pro or hydroxy-Pro; Xaa at residue 10 is Trp (D or L) or halo-Trp; Xaa at residue 12 is Glu or gamma-carboxy-Glu; Xaa at residue 13 is Tyr, nor-Tyr, mono-halo-Tyr,

<220>

<221> SITE

<222> (13)..(19)

<223> di-halo-Tyr, O-sulpho-Tyr, O-phospho-Tyr or nitro-Tyr; Xaa at residues 14 and 19 is Lys, N-methyl-Lys, N,N-dimethyl-Lys or N,N,N-trimethyl-Lys.

<400> 179

Leu	Asn	Cys	Cys	Ser	Ile	Xaa	Gly	Cys	Xaa	Asn	Xaa	Xaa	Asp	Arg
1					5				10				15	

Cys Ser Xaa Val Arg
20

<210> 180

<211> 18

<212> PRT

<213> Conus aurisiacus

<220>

<221> SITE

<222> (7)..(14)

<223> Xaa at residues 7 and 14 is Pro or hydroxy-Pro; Xaa at residue 10 is Tyr, mono-halo-Tyr, di-halo-Tyr, O-sulpho-Tyr, O-phospho-Tyr or nitro-Tyr.

<400> 180

Gly	Gly	Cys	Cys	Ser	His	Xaa	Val	Cys	Xaa	Phe	Asn	Asn	Xaa	Gln	Met
1					5				10				15		

Cys Arg

<210> 181
 <211> 18
 <212> PRT
 <213> Conus aurisiacus

<220>
 <221> SITE
 <222> (7)..(14)
 <223> Xaa at residues 7 and 14 is Pro or hydroxy-Pro.

<400> 181
 Gly Gly Cys Cys Ser His Xaa Val Cys Asn Leu Asn Asn Xaa Gln Met
 1 5 10 15

Cys Arg

<210> 182
 <211> 17
 <212> PRT
 <213> Conus bandanus

<220>
 <221> SITE
 <222> (6)..(15)
 <223> Xaa at residues 6 and 7 is Pro or hydroxy-Pro; Xaa
 at residues 9 and 15 is Tyr, mono-halo-Tyr,
 di-halo-Tyr, O-sulpho-Tyr, O-phospho-Tyr or
 nitro-Tyr.

<400> 182
 Gly Cys Cys Ser His Xaa Xaa Cys Xaa Ala Asn Asn Gln Ala Xaa Cys
 1 5 10 15

Asn

<210> 183
 <211> 17
 <212> PRT
 <213> Conus betulinus

<220>
 <221> SITE
 <222> (7)..(15)
 <223> Xaa at residues 7 and 14 is Pro and hydroxy-Pro;
 Xaa at residue 15 is Glu or gamma-carboxy-Glu.

<400> 183
 Gly Gly Cys Cys Ser His Xaa Ala Cys Ser Val Thr His Xaa Xaa Leu
 1 5 10 15

Cys

<210> 184
 <211> 18
 <212> PRT
 <213> Conus betulinus

<220>
<221> SITE
<222> (6)..(12)
<223> Xaa at residue 6 is Tyr, nor-Tyr, mono-halo-Tyr,
di-halo-Tyr, O-sulpho-Tyr, O-phospho-Tyr or
nitro-Tyr; Xaa at residue 7 is Pro and
hydroxy-Pro; Xaa at residue 12 is Glu or

<220>
<221> SITE
<222> (6)..(12)
<223> gamma-carboxy-Glu.

<400> 184
Gly Gly Cys Cys Ser Xaa Xaa Ala Cys Ser Val Xaa His Gln Asp Leu
1 5 10 15

Cys Asp

<210> 185
<211> 25
<212> PRT
<213> Conus characteristicus

<220>
<221> SITE
<222> (8)..(22)
<223> Xaa at residues 8 and 22 is Pro or hydroxy-Pro;
Xaa at residue 10 is Trp (D or L) or halo-Trp; Xaa
at residue 13 is Tyr, nor-Tyr, mono-halo-Tyr,
di-halo-Tyr, O-sulpho-Tyr, O-phospho-Tyr or

<220>
<221> SITE
<222> (8)..(22)
<223> nitro-Tyr; Xaa at residues 15, 16 and 19 is Glu
or gamma-carboxy-Glu.

<400> 185
Val Ser Cys Cys Val Val Arg Xaa Cys Xaa Ile Arg Xaa Gln Xaa Xaa
1 5 10 15
Cys Leu Xaa Ala Asp Xaa Arg Thr Leu
20 25

<210> 186
<211> 21
<212> PRT
<213> Conus characteristicus

<220>
<221> SITE
<222> (1)..(19)
<223> Xaa at residue 1 is Gln or pyro-Glu; Xaa at
residue 7 is Pro or hydroxy-Pro; Xaa at residue 10
is Trp (D or L) or halo-Trp; Xaa at residues 11
and 19 is Glu or gamma-carboxy-Glu.

<220>
<221> SITE

<222> (12)..(16)
<223> Xaa at residues 12 and 16 is Lys, N-methyl-Lys,
N,N-dimethyl-Lys or N,N,N-trimethyl-Lys; Xaa at
residue 13 is Tyr, mono-halo-Tyr, di-halo-Tyr,
O-sulpho-Tyr, O-phospho-Tyr or nitro-Tyr.

<400> 186
Xaa Asn Cys Cys Ser Ile Xaa Gly Cys Xaa Xaa Xaa Gly Asp Xaa
1 5 10 15
Cys Ser Xaa Val Arg
20

<210> 187
<211> 16
<212> PRT
<213> Conus catus

<220>
<221> SITE
<222> (6)..(13)
<223> Xaa at residues 6 and 13 is Pro or hydroxy-Pro;
Xaa at residue 11 is Glu or gamma-carboxy-Glu.

<400> 187
Gly Cys Cys Ser Asn Xaa Val Cys His Leu Xaa His Xaa Asn Ala Cys
1 5 10 15

<210> 188
<211> 17
<212> PRT
<213> Conus catus

<220>
<221> SITE
<222> (6)..(13)
<223> Xaa at residues 6 and 13 is Pro or hydroxy-Pro;
Xaa at residue 9 is Tyr, nor-Tyr, mono-halo-Tyr,
di-halo-Tyr, O-sulpho-Tyr, O-phospho-Tyr or
nitro-Tyr.

<400> 188
Gly Cys Cys Ser Asn Xaa Ile Cys Xaa Phe Asn Asn Xaa Arg Ile Cys
1 5 10 15

Arg

<210> 189
<211> 17
<212> PRT
<213> Conus episcopatus

<220>
<221> SITE
<222> (1)..(14)
<223> Xaa at residues 1 and 14 is Glu or
gamma-carboxy-Glu; Xaa at residues 6, 7 and 13 is
Pro or hydroxy-Pro; Xaa at residue 10 is Trp (D or
L) or halo-Trp.

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<220>
<221> SITE
<222> (11)
<223> Xaa at residue 11 is Lys, N-methyl-Lys,
      N,N-dimethyl-Lys or N,N,N-trimethyl-Lys.

<400> 189
Xaa Cys Cys Ser Gln Xaa Xaa Cys Arg Xaa Xaa His Xaa Xaa Leu Cys
   1           5           10          15

Ser

<210> 190
<211> 16
<212> PRT
<213> Conus geographus

<220>
<221> SITE
<222> (6)
<223> Xaa at residue 6 is Pro or hydroxy-Pro.

<400> 190
Gly Cys Cys Ser His Xaa Ala Cys Ala Gly Asn Asn Gln His Ile Cys
   1           5           10          15

<210> 191
<211> 18
<212> PRT
<213> Conus geographus

<220>
<221> SITE
<222> (6)...(13)
<223> Xaa at residues 6 and 13 is Pro or hydroxy-Pro.

<400> 191
Gly Cys Cys Ala Val Xaa Ser Cys Arg Leu Arg Asn Xaa Asp Leu Cys
   1           5           10          15

Gly Gly

<210> 192
<211> 16
<212> PRT
<213> Conus imperialis

<220>
<221> NP_BIND
<222> (6)...(13)
<223> Xaa at residues 6 and 13 is Pro or hydroxy-Pro.

<400> 192
Gly Cys Cys Ser His Xaa Ala Cys Asn Val Asn Asn Xaa His Ile Cys
   1           5           10          15

<210> 193
<211> 20

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<212> PRT
<213> Conus lividus

<220>
<221> SITE
<222> (2)..(10)
<223> Xaa at residues 2, 7, 9 and 10 is Pro or hydroxy-Pro; Xaa at residues 3 and 4 is Glu or gamma-carboxy-Glu.

<400> 193
Thr Xaa Xaa Xaa Cys Cys Xaa Asn Xaa Xaa Cys Phe Ala Thr Asn Ser
1 5 10 15

Asp Ile Cys Gly
20

<210> 194
<211> 17
<212> PRT
<213> Conus lividus

<220>
<221> SITE
<222> (7)..(12)
<223> Xaa at residue 7 is Pro or hydroxy-Pro; Xaa at residue 12 is Lys, N-methyl-Lys, N,N-dimethyl-Lys or N,N,N-trimethyl-Lys.

<400> 194
Asp Ala Cys Cys Ser Asp Xaa Arg Cys Ser Gly Xaa His Gln Asp Leu
1 5 10 15

Cys

<210> 195
<211> 17
<212> PRT
<213> Conus lividus

<220>
<221> SITE
<222> (1)..(7)
<223> Xaa at residue 1 is Glu or gamma-carboxy-Glu; Xaa at residue 7 is Pro or hydroxy-Pro.

<400> 195
Xaa Asp Cys Cys Ser Asp Xaa Arg Cys Ser Val Gly His Gln Asp Leu
1 5 10 15

Cys

<210> 196
<211> 16
<212> PRT
<213> Conus lividus

<220>
<221> SITE

<222> (6)
 <223> Xaa at residue 6 is Pro or hydroxy-Pro.

<400> 196
 Gly Cys Cys Ser His Xaa Ala Cys Ala Gly Ser Asn Ala His Ile Cys
 1 5 10 15

<210> 197
 <211> 17
 <212> PRT
 <213> Conus lividus

<220>
 <221> SITE
 <222> (1)..(7)
 <223> Xaa at residue 1 is Glu or gamma-carboxy-Glu; Xaa
 at residue 7 is Pro or hydroxy-Pro.

<400> 197
 Xaa Asp Cys Cys Ser Asp Xaa Arg Cys Ser Val Gly His Gln Asp Met
 1 5 10 15

Cys

<210> 198
 <211> 16
 <212> PRT
 <213> Conus lividus

<220>
 <221> SITE
 <222> (6)..(13)
 <223> Xaa at residues 6 and 13 is Pro or hydroxy-Pro.

<400> 198
 Gly Cys Cys Ser His Xaa Ala Cys Ala Gly Asn Asn Xaa His Ile Cys
 1 5 10 15

<210> 199
 <211> 17
 <212> PRT
 <213> Conus lividus

<220>
 <221> SITE
 <222> (6)..(14)
 <223> Xaa at residues 6 and 13 is Pro or hydroxy-Pro;
 Xaa at residue 14 is Tyr, mono-halo-Tyr,
 di-halo-Tyr, O-sulpho-Tyr, O-phospho-Tyr or
 nitro-Tyr.

<400> 199
 Gly Cys Cys Gly Asn Xaa Ser Cys Ser Ile His Ile Xaa Xaa Val Cys
 1 5 10 15

Asn

<210> 200

<211> 21
 <212> PRT
 <213> Conus lividus

<220>
 <221> SITE
 <222> (4)..(5)
 <223> Xaa at residues 4 and 5 is Glu or
 gamma-carboxy-Glu.

<400> 200
 Thr Asp Ser Xaa Xaa Cys Cys Leu Asp Ser Arg Cys Ala Gly Gln His
 1 5 10 15

Gln Asp Leu Cys Gly
 20

<210> 201
 <211> 17
 <212> PRT
 <213> Conus marmoreus

<220>
 <221> SITE
 <222> (6)..(15)
 <223> Xaa at residues 6 and 7 is Pro or hydroxy-Pro; Xaa
 at residues 9 and 15 is Tyr, mono-halo-Tyr,
 di-halo-Tyr, O-sulpho-Tyr, O-phospho-Tyr or
 nitro-Tyr.

<400> 201
 Gly Cys Cys Ser Asn Xaa Xaa Cys Xaa Ala Asn Asn Gln Ala Xaa Cys
 1 5 10 15

Asn

<210> 202
 <211> 16
 <212> PRT
 <213> Conus marmoreus

<220>
 <221> SITE
 <222> (6)..(13)
 <223> Xaa at residues 6 and 13 is Pro or hydroxy-Pro.

<400> 202
 Gly Cys Cys Ser His Xaa Ala Cys Ser Val Asn Asn Xaa Asp Ile Cys
 1 5 10 15

<210> 203
 <211> 18
 <212> PRT
 <213> Conus musicus

<220>
 <221> SITE
 <222> (2)..(15)
 <223> Xaa at residues 2 and 12 is Lys, N-methyl-Lys,
 N,N-dimethyl-Lys or N,N,N-trimethyl-Lys; Xaa at

residue 14 is Pro or hydroxy-Pro.

<220>
<221> SITE
<222> (16)
<223> Xaa at residue 16 is Tyr, mono-halo-Tyr,
di-halo-Tyr, O-sulpho-Tyr, O-phospho-Tyr or
nitro-Tyr.

<400> 203
Gly Xaa Cys Cys Ile Asn Asp Ala Cys Arg Ser Xaa His Xaa Gln Xaa
1 5 10 15
Cys Ser

<210> 204
<211> 17
<212> PRT
<213> Conus musicus

<220>
<221> SITE
<222> (4)..(15)
<223> Xaa at residues 4 and 15 is Tyr, nor-Tyr,
mono-halo-Tyr, di-halo-Tyr, O-sulpho-Tyr,
O-phospho-Tyr or nitro-Tyr; Xaa at residue 13 is
Pro or hydroxy-Pro.

<400> 204
Gly Cys Cys Xaa Asn Ile Ala Cys Arg Ile Asn Asn Xaa Arg Xaa Cys
1 5 10 15
Arg

<210> 205
<211> 17
<212> PRT
<213> Conus obscurus

<220>
<221> SITE
<222> (6)..(15)
<223> Xaa at residues 6 and 13 is Pro or hydroxy-Pro;
Xaa at residues 12 and 15 is Tyr, nor-Tyr,
mono-halo-Tyr, di-halo-Tyr, O-sulpho-Tyr,
O-phospho-Tyr or nitro-Tyr.

<220>
<221> SITE
<222> (14)
<223> Xaa at residue 14 is Lys, N-methyl-Lys,
N,N-dimethyl-Lys or N,N,N-trimethyl-Lys.

<400> 205
Gly Cys Cys Ser His Xaa Val Cys Arg Phe Asn Xaa Xaa Xaa Cys
1 5 10 15
Gly

<210> 206
 <211> 18
 <212> PRT
 <213> Conus obscurus

<220>
 <221> SITE
 <222> (2)..(15)
 <223> Xaa at residue 2 is Glu or gamma-carboxy-Glu; Xaa at residues 7, 8 and 14 is Pro or hydroxy-Pro; Xaa at residue 15 is Tyr, nor-Tyr, mono-halo-Tyr, di-halo-Tyr, O-sulpho-Tyr, O-phospho-Tyr or

<220>
 <221> SITE
 <222> (2)..(15)
 <223> nitro-Tyr

<400> 206
 Asp Xaa Cys Cys Ala Ser Xaa Xaa Cys Arg Leu Asn Asn Xaa Xaa Val
 1 5 10 15

Cys His

<210> 207
 <211> 19
 <212> PRT
 <213> Conus obscurus

<220>
 <221> SITE
 <222> (6)..(18)
 <223> Xaa at residue 6 is Pro or hydroxy-Pro; Xaa at residue 9 is Trp (D or L) or halo-Trp; Xaa at residues 14 and 18 is Glu or gamma-carboxy-Glu.

<220>
 <221> SITE
 <222> (15)
 <223> Xaa at residue 15 is Tyr, nor-Tyr, mono-halo-Tyr, di-halo-Tyr, O-sulpho-Tyr, O-phospho-Tyr or nitro-Tyr.

<400> 207
 Gly Cys Cys Ser Asn Xaa Val Cys Xaa Gln Asn Asn Ala Xaa Xaa Cys
 1 5 10 15

Arg Xaa Ser

<210> 208
 <211> 16
 <212> PRT
 <213> Conus obscurus

<220>
 <221> SITE
 <222> (6)..(15)
 <223> Xaa at residues 6 and 7 is Pro or hydroxy-Pro; Xaa at residue 15 is Tyr, nor-Tyr, mono-halo-Tyr, di-halo-Tyr, O-sulpho-Tyr, O-phospho-Tyr or

nitro-Tyr.

<400> 208
 Gly Cys Cys Ser His Xaa Xaa Cys Ala Gln Asn Asn Gln Asp Xaa Cys
 1 5 10 15

<210> 209
 <211> 19
 <212> PRT
 <213> Conus obscurus

<220>
 <221> SITE
 <222> (6)..(15)
 <223> Xaa at residue 6 is Pro or hydroxy-Pro; Xaa at
 residues 14 and 18 is Glu or gamma-carboxy-Glu;
 Xaa at residue 15 is Tyr, nor-Tyr, mono-halo-Tyr,
 di-halo-Tyr, O-sulpho-Tyr, O-phospho-Tyr or

<220>
 <221> SITE
 <222> (6)..(15)
 <223> nitro-Tyr.

<400> 209
 Gly Cys Cys Ser His Xaa Ala Cys Ser Gly Asn Asn Arg Xaa Xaa Cys
 1 5 10 15

Arg Xaa Ser

<210> 210
 <211> 18
 <212> PRT
 <213> Conus omaria

<220>
 <221> SITE
 <222> (2)..(15)
 <223> Xaa at residues 2, 7 and 14 is Pro or hydroxy-Pro;
 Xaa at residue 6 is Tyr, nor-Tyr, mono-halo-Tyr,
 di-halo-Tyr, O-sulpho-Tyr, O-phospho-Tyr or
 nitro-Tyr; Xaa at residue 15 is Glu or

<220>
 <221> SITE
 <222> (2)..(15)
 <223> gamma-carboxy-Glu

<400> 210
 Asp Xaa Cys Cys Ser Xaa Xaa Asp Cys Gly Ala Asn His Xaa Xaa Ile
 1 5 10 15

Cys Gly

<210> 211
 <211> 17
 <212> PRT
 <213> Conus omaria

<220>
<221> SITE
<222> (1)...(14)
<223> Xaa at residues 1 and 14 is Glu or
gamma-carboxy-Glu; Xaa at residues 6, 7 and 13 is
Pro or hydroxy-Pro; Xaa at residue 10 is Trp (D or
L) or halo-Trp.

<220>
<221> SITE
<222> (11)
<223> Xaa at residue 11 is Lys, N-methyl-Lys,
N,N-dimethyl-Lys or N,N,N-trimethyl-Lys.

<400> 211
Xaa Cys Cys Ser Gln Xaa Xaa Cys Arg Xaa Xaa His Xaa Xaa Leu Cys
1 5 10 15

Ser

<210> 212
<211> 16
<212> PRT
<213> Conus omaria

<220>
<221> SITE
<222> (6)...(13)
<223> Xaa at residues 6 and 13 is Pro or hydroxy-Pro.

<400> 212
Gly Cys Cys Ser His Xaa Ala Cys Ala Gly Asn Asn Xaa His Ile Cys
1 5 10 15

<210> 213
<211> 16
<212> PRT
<213> Conus omaria

<220>
<221> SITE
<222> (6)...(15)
<223> Xaa at residues 6 and 13 is Pro or hydroxy-Pro;
Xaa at residue 15 is Tyr, nor-Tyr, mono-halo-Tyr,
di-halo-Tyr, O-sulpho-Tyr, O-phospho-Tyr or
nitro-Tyr.

<400> 213
Gly Cys Cys Ser Asp Xaa Ser Cys Asn Val Asn Asn Xaa Asp Xaa Cys
1 5 10 15

<210> 214
<211> 18
<212> PRT
<213> Conus omaria

<220>
<221> SITE
<222> (1)...(7)
<223> Xaa at residues 1 and 2 is Glu or

gamma-carboxy-Glu; Xaa at residue 7 is Pro or hydroxy-Pro.

<400> 214
 Xaa Xaa Cys Cys Ser Asp Xaa Arg Cys Ser Val Gly His Gln Asp Met
 1 5 10 15

Cys Arg

<210> 215
 <211> 17
 <212> PRT
 <213> Conus purpurascens

<220>
 <221> SITE
 <222> (7)..(15)
 <223> Xaa at residue 7 is Pro or hydroxy-Pro; Xaa at residue 15 is Glu or gamma-carboxy-Glu.

<400> 215
 Gly Gly Cys Cys Ser Asn Xaa Ala Cys Leu Val Asn His Leu Xaa Met
 1 5 10 15

Cys

<210> 216
 <211> 18
 <212> PRT
 <213> Conus purpurascens

<220>
 <221> SITE
 <222> (3)..(15)
 <223> Xaa at residues 3, 8 and 15 is Pro or hydroxy-Pro.

<400> 216
 Arg Asp Xaa Cys Cys Phe Asn Xaa Ala Cys Asn Val Asn Asn Xaa Gln
 1 5 10 15

Ile Cys

<210> 217
 <211> 21
 <212> PRT
 <213> Conus purpurascens

<220>
 <221> SITE
 <222> (5)..(8)
 <223> Xaa at residue 5 is Pro or hydroxy-Pro; Xaa at residue 8 is Trp (D or L) or halo-Trp.

<400> 217
 Cys Cys Ser Asp Xaa Ser Cys Xaa Arg Leu His Ser Leu Ala Cys Thr
 1 5 10 15

Gly Ile Val Asn Arg

<210> 218
<211> 16
<212> PRT
<213> Conus purpurascens

<220>
<221> SITE
<222> (5)
<223> Xaa at residue 5 is Pro or hydroxy-Pro.

<400> 218
Cys Cys Thr Asn Xaa Ala Cys Leu Val Asn Asn Ile Arg Phe Cys Gly
1 5 10 15

<210> 219
<211> 18
<212> PRT
<213> Conus regius

<220>
<221> SITE
<222> (2)..(7)
<223> Xaa at residue 2 is Glu or gamma-carboxy-Glu; Xaa
at residue 7 is Pro or hydroxy-Pro.

<400> 219
Asp Xaa Cys Cys Ser Asp Xaa Arg Cys His Gly Asn Asn Arg Asp His
1 5 10 15
Cys Ala

<210> 220
<211> 17
<212> PRT
<213> Conus regius

<220>
<221> SITE
<222> (6)..(13)
<223> Xaa at residues 6 and 13 is Pro or hydroxy-Pro.

<400> 220
Asp Cys Cys Ser His Xaa Leu Cys Arg Leu Phe Val Xaa Gly Leu Cys
1 5 10 15

Ile

<210> 221
<211> 17
<212> PRT
<213> Conus regius

<220>
<221> SITE
<222> (6)..(13)
<223> Xaa at residues 6 and 13 is Pro or hydroxy-Pro;

Xaa at residue 9 is Lys, N-methyl-Lys,
N,N-dimethyl-Lys or N,N,N-trimethyl-Lys.

<220>
<221> SITE
<222> (12)
<223> Xaa at residue 12 is Tyr, nor-Tyr, mono-halo-Tyr,
di-halo-Tyr, O-sulpho-Tyr, O-phospho-Tyr or
nitro-Tyr.

<400> 221
Gly Cys Cys Ser His Xaa Val Cys Xaa Val Arg Xaa Xaa Asp Leu Cys
1 5 10 15

Arg

<210> 222
<211> 16
<212> PRT
<213> Conus regius

<220>
<221> SITE
<222> (6)..(13)
<223> Xaa at residues 6 and 13 is Pro or hydroxy-Pro.

<400> 222
Gly Cys Cys Ser His Xaa Ala Cys Asn Val Asn Asn Xaa His Ile Cys
1 5 10 15

<210> 223
<211> 16
<212> PRT
<213> Conus regius

<220>
<221> SITE
<222> (6)..(12)
<223> Xaa at residue 6 is Pro or hydroxy-Pro; Xaa at
residue 12 is Tyr, nor-Tyr, nor-Tyr,
mono-halo-Tyr, di-halo-Tyr, O-sulpho-Tyr,
O-phospho-Tyr or nitro-Tyr.

<220>
<221> SITE
<222> (9)
<223> Xaa at residue 9 is Lys, N-methyl-Lys,
N,N-dimethyl-Lys or N,N,N-trimethyl-Lys.

<400> 223
Gly Cys Cys Ser His Xaa Val Cys Xaa Val Arg Xaa Ser Asp Met Cys
1 5 10 15

<210> 224
<211> 17
<212> PRT
<213> Conus stercusmuscarum

<220>
<221> SITE

<222> (7)..(14)
<223> Xaa at residues 7 and 14 is Pro or hydroxy-Pro;
Xaa at residue 10 is Lys, N-methyl-Lys,
N,N-dimethyl-Lys or N,N,N-trimethyl-Lys.

<400> 224
Gly Gly Cys Cys Ser His Xaa Ala Cys Xaa Val His Phe Xaa His Ser
1 5 10 15

Cys

<210> 225
<211> 20
<212> PRT
<213> Conus stercusmuscarum

<220>
<221> SITE
<222> (6)..(14)
<223> Xaa at residues 6 and 13 is Pro or hydroxy-Pro;
Xaa at residue 14 is Glu or gamma-carboxy-Glu.

<400> 225
Val Cys Cys Ser Asn Xaa Val Cys His Val Asp His Xaa Xaa Leu Cys
1 5 10 15

Arg Arg Arg Arg
20

<210> 226
<211> 17
<212> PRT
<213> Conus striatus

<220>
<221> SITE
<222> (6)..(13)
<223> Xaa at residues 6 and 13 is Pro or hydroxy-Pro.

<400> 226
Gly Cys Cys Ser His Xaa Val Cys Asn Leu Ser Asn Xaa Gln Ile Cys
1 5 10 15

Arg

<210> 227
<211> 18
<212> PRT
<213> Conus textile

<220>
<221> SITE
<222> (1)..(15)
<223> Xaa at residue 1 is Gln or pyro-Glu; Xaa at
residues 2 and 15 is Glu or gamma-carboxy-Glu; Xaa
at residues 7 and 14 is Pro or hydroxy-Pro.

<400> 227
Xaa Xaa Cys Cys Ser His Xaa Ala Cys Asn Val Asp His Xaa Xaa Ile

85

1 5 10 15

Cys Arg

<210> 228
<211> 17
<212> PRT
<213> Conus tulipa

<220>
<221> SITE
<222> (6)
<223> Xaa at residue 6 is Pro or hydroxy-Pro.

<400> 228
Gly Cys Cys Ser Asn Xaa Ala Cys Leu Val Asn His Ile Arg Phe Cys
1 5 10 15

Gly

<210> 229
<211> 17
<212> PRT
<213> Conus virgo

<220>
<221> SITE
<222> (6)..(13)
<223> Xaa at residues 6 and 13 is Pro or hydroxy-Pro.

<400> 229
Asp Cys Cys Asp Asp Xaa Ala Cys Thr Val Asn Asn Xaa Gly Leu Cys
1 5 10 15

Thr

<210> 230
<211> 20
<212> PRT
<213> Conus textile

<220>
<221> SITE
<222> (6)..(13)
<223> Xaa at residues 6, 7 and 13 is Pro or hydroxy-Pro;
Xaa at residue 11 is Lys, N-methyl-Lys,
N,N-dimethyl-Lys or N,N,N-trimethyl-Lys.

<400> 230
Gly Cys Cys Ser Asn Xaa Xaa Cys Ile Ala Xaa Asn Xaa His Met Cys
1 5 10 15

Gly Gly Arg Arg
20

<210> 231
<211> 18

<212> PRT
<213> Conus geographus

<220>
<221> SITE
<222> (5)..(9)
<223> Xaa at residue 5 is Pro or hydroxy-Pro; Xaa at residue 8 is Tyr, nor-Tyr, mono-halo-Tyr, di-halo-Tyr, O-sulpho-Tyr, O-phospho-Tyr or nitro-Tyr; Xaa at residue 9 is Glu or

<220>
<221> SITE
<222> (9)..(14)
<223> gamma-carboxy-Glu; Xaa at residues 10, 11, 12 and 14 is Lys, N-methyl-Lys, N,N-dimethyl-Lys or N,N,N-trimethyl-Lys.

<400> 231
Cys Cys Thr Ile Xaa Ser Cys Xaa Xaa Xaa Xaa Ile Xaa Ala Cys
1 5 10 15
Val Phe

<210> 232
<211> 18
<212> PRT
<213> Conus regius

<220>
<221> SITE
<222> (6)..(16)
<223> Xaa at residues 6 and 16 is Pro or hydroxy-Pro; Xaa at residue 13 is Lys, N-methyl-Lys, N,N-dimethyl-Lys or N,N,N-trimethyl-Lys.

<400> 232
Gly Cys Cys Gly Asn Xaa Ala Cys Ser Gly Ser Ser Xaa Asp Ala Xaa
1 5 10 15
Ser Cys

<210> 233
<211> 108
<212> DNA
<213> Conus imperialis

<220>
<221> CDS
<222> (1)..(105)

<400> 233
tct gat gga aag agt gcc gcg gcc aaa gcc aaa ccg tct cac ctg acg 48
Ser Asp Gly Lys Ser Ala Ala Ala Lys Ala Lys Pro Ser His Leu Thr
1 5 10 15

gct cca ttc atc agg gac gaa tgc tgt tcc gat tct cgc tgt ggc aag 96
Ala Pro Phe Ile Arg Asp Glu Cys Cys Ser Asp Ser Arg Cys Gly Lys
20 25 30

87

aac tgt ctt tga
Asn Cys Leu
35

108

<210> 234
<211> 35
<212> PRT
<213> Conus imperialis

<400> 234
Ser Asp Gly Lys Ser Ala Ala Ala Lys Ala Lys Pro Ser His Leu Thr
1 5 10 15

Ala Pro Phe Ile Arg Asp Glu Cys Cys Ser Asp Ser Arg Cys Gly Lys
20 25 30

Asn Cys Leu
35

<210> 235
<211> 108
<212> DNA
<213> Conus imperialis

<220>
<221> CDS
<222> (1)..(105)

<400> 235
ttt gat gga agg aat gcc cca gcc gac gac aaa gcg tct gac ctg atc 48
Phe Asp Gly Arg Asn Ala Pro Ala Asp Asp Lys Ala Ser Asp Leu Ile
1 5 10 15

gct caa atc gtc agg aga gca tgc tgt tcc gat cgt cgc tgt aga tgg 96
Ala Gln Ile Val Arg Arg Ala Cys Cys Ser Asp Arg Arg Cys Arg Trp
20 25 30

agg tgt ggt tga
Arg Cys Gly
35

<210> 236
<211> 35
<212> PRT
<213> Conus imperialis

<400> 236
Phe Asp Gly Arg Asn Ala Pro Ala Asp Asp Lys Ala Ser Asp Leu Ile
1 5 10 15

Ala Gln Ile Val Arg Arg Ala Cys Cys Ser Asp Arg Arg Cys Arg Trp
20 25 30

Arg Cys Gly
35

<210> 237
<211> 145
<212> DNA
<213> Conus regius

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<220>
<221> CDS
<222> (1)..(105)

<400> 237
tct gat gga agg aat gcc gca gcc gac gcc aga gcg tct ccc cgg atc 48
Ser Asp Gly Arg Asn Ala Ala Ala Asp Ala Arg Ala Ser Pro Arg Ile
   1           5           10          15

gct ctt ttc ctc agg ttc aca tgc tgt agg aga ggt acc tgc tcc cag 96
Ala Leu Phe Leu Arg Phe Thr Cys Cys Arg Arg Gly Thr Cys Ser Gln
   20          25          30

cac tgt ggt tgaagacact gctgctccag gaccctctga accacgacgt , 145
His Cys Gly
   35

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<210> 238
 <211> 35
 <212> PRT
 <213> Conus regius

<400> 238
 Ser Asp Gly Arg Asn Ala Ala Ala Asp Ala Arg Ala Ser Pro Arg Ile
 1 5 10 15

Ala Leu Phe Leu Arg Phe Thr Cys Cys Arg Arg Gly Thr Cys Ser Gln
 20 25 30

His Cys Gly
 35

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<210> 239
<211> 145
<212> DNA
<213> Conus regius

<220>
<221> CDS
<222> (1)..(105)

<400> 239
tct aat gga agg aat gcc gca gcc gac gcc aaa gcg tct caa cgg atc      48
Ser Asn Gly Arg Asn Ala Ala Ala Asp Ala Lys Ala Ser Gln Arg Ile
 1           5               10              15
gct cca ttc ctc agg gac tat tgc tgt agg aga cat gcc tgt acg ttg      96
Ala Pro Phe Leu Arg Asp Tyr Cys Cys Arg Arg His Ala Cys Thr Leu
 20          25               30
att tgt ggt tgaagacgct gctgctccag gaccctctga accacgacgt
Ile Cys Gly
 35

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<210> 240
<211> 35
<212> PRT
<213> *Conus regius*

<400> 240
Ser Asn Gly Arg Asn Ala Ala Ala Asp Ala Lys Ala Ser Gln Arg Ile

89

1	5	10	15	
Ala Pro Phe Leu Arg Asp Tyr Cys Cys Arg Arg His Ala Cys Thr Leu				
20	25	30		
Ile Cys Gly				
35				


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<210> 241
<211> 145
<212> DNA
<213> Conus regius

<220>
<221> CDS
<222> (1)..(105)

<400> 241
tct aat gga agg aat gcc gca gcc gac gcc aaa gcg tct caa cgg atc      48
Ser Asn Gly Arg Asn Ala Ala Ala Asp Ala Lys Ala Ser Gln Arg Ile
 1           5           10          15

gct cca ttc ctc agg gac tat tgc tgt agg aga cct ccc tgt acg ttg      96
Ala Pro Phe Leu Arg Asp Tyr Cys Cys Arg Arg Pro Pro Cys Thr Leu
 20          25          30

att tgt ggt tgaagacgct gctgctccag gaccctctga accacgacgt      145
Ile Cys Gly
 35

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<210> 242
<211> 35
<212> PRT
<213> Conus regius

<400> 242
Ser Asn Gly Arg Asn Ala Ala Ala Asp Ala Lys Ala Ser Gln Arg Ile      48
 1           5           10          15

Ala Pro Phe Leu Arg Asp Tyr Cys Cys Arg Arg Pro Pro Cys Thr Leu
 20          25          30

Ile Cys Gly
 35

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<210> 243
<211> 136
<212> DNA
<213> Conus regius

<220>
<221> CDS
<222> (1)..(96)

<400> 243
tct aat aaa agg aag aat gcc gca atg ctt gac atg atc gct caa cac      48
Ser Asn Lys Arg Lys Asn Ala Ala Met Leu Asp Met Ile Ala Gln His
 1           5           10          15

gcc ata agg ggt tgc tgt tcc gat cct cgc tgt aga tat aga tgt cgt      96
Ala Ile Arg Gly Cys Cys Ser Asp Pro Arg Cys Arg Tyr Arg Cys Arg

```

90

20 25 30 136

tgaagacgct gctgctccag gaccctctga accacgacgt

<210> 244
<211> 32
<212> PRT
<213> Conus regius

<400> 244
Ser Asn Lys Arg Lys Asn Ala Ala Met Leu Asp Met Ile Ala Gln His
1 5 10 15

Ala Ile Arg Gly Cys Cys Ser Asp Pro Arg Cys Arg Tyr Arg Cys Arg
20 25 30

<210> 245
<211> 145
<212> DNA
<213> Conus regius

<220>
<221> CDS
<222> (1)..(105)

<400> 245
ttt aat gga agg agt gcc gca gcc gac caa aat gcg cct ggc ctg atc 48
Phe Asn Gly Arg Ser Ala Ala Asp Gln Asn Ala Pro Gly Leu Ile
1 5 10 15

gct caa gtc gtc aga gga ggg tgc tgt tcc gat ccc cgc tgc gcc tgg 96
Ala Gln Val Val Arg Gly Gly Cys Cys Ser Asp Pro Arg Cys Ala Trp
20 25 30

aga tgt ggt tgaagacgtt gctgctccag gaccctctga accacgacgt 145
Arg Cys Gly
35

<210> 246
<211> 35
<212> PRT
<213> Conus regius

<400> 246
Phe Asn Gly Arg Ser Ala Ala Ala Asp Gln Asn Ala Pro Gly Leu Ile
1 5 10 15

Ala Gln Val Val Arg Gly Gly Cys Cys Ser Asp Pro Arg Cys Ala Trp
20 25 30

Arg Cys Gly
35

<210> 247
<211> 145
<212> DNA
<213> Conus regius

<220>
<221> CDS

<222> (1)..(105)

<400> 247

ttt gat gga agg aat gcc gca gac gcc aaa gtg att aac acg gtc	48
Phe Asp Gly Arg Asn Ala Ala Asp Ala Lys Val Ile Asn Thr Val	
1 5 10 15	

gct cga atc gcc tgg gat ata tgc tgt tcc gaa cct gac tgt aac cat	96
Ala Arg Ile Ala Trp Asp Ile Cys Cys Ser Glu Pro Asp Cys Asn His	
20 25 30	

aaa tgt gtt tgaagacgct tctgctccag gaccctctga accacgacgt	145
Lys Cys Val	
35	

<210> 248

<211> 35

<212> PRT

<213> Conus regius

<400> 248

Phe Asp Gly Arg Asn Ala Ala Asp Ala Lys Val Ile Asn Thr Val	
1 5 10 15	

Ala Arg Ile Ala Trp Asp Ile Cys Cys Ser Glu Pro Asp Cys Asn His	
20 25 30	

Lys Cys Val	
35	

<210> 249

<211> 136

<212> DNA

<213> Conus regius

<220>

<221> CDS

<222> (1)..(96)

<400> 249

tct aat aaa agg aag aat gcc gca atg ctt gac atg atc gct caa cac	48
Ser Asn Lys Arg Lys Asn Ala Ala Met Leu Asp Met Ile Ala Gln His	
1 5 10 15	

gcc ata agg ggt tgc tgt tcc gat cct cgc tgt aaa cat cag tgt ggt	96
Ala Ile Arg Gly Cys Cys Ser Asp Pro Arg Cys Lys His Gln Cys Gly	
20 25 30	

tgaagacgct gctgctccag gaccctctga accacgacgt	136
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<210> 250

<211> 32

<212> PRT

<213> Conus regius

<400> 250

Ser Asn Lys Arg Lys Asn Ala Ala Met Leu Asp Met Ile Ala Gln His	
1 5 10 15	

Ala Ile Arg Gly Cys Cys Ser Asp Pro Arg Cys Lys His Gln Cys Gly	
20 25 30	

<210> 251
<211> 136
<212> DNA
<213> Conus musicus

<220>
<221> CDS
<222> (1)..(105)

<400> 251 48
atc aag aat aca gca gcc agc aac aaa gcg tct agc ctg gtg gct ctt
Ile Lys Asn Thr Ala Ala Ser Asn Lys Ala Ser Ser Leu Val Ala Leu
1 5 10 15
gtt gtc agg gga tgc tgt tac aat cct gtc tgc aag aaa tat tat tgt 96
Val Val Arg Gly Cys Cys Tyr Asn Pro Val Cys Lys Lys Tyr Tyr Cys
20 25 30
tgg aaa ggc tgatgctcca ggaccctctg aaccacgacg t 136
Trp Lys Gly
35

<210> 252
<211> 35
<212> PRT
<213> Conus musicus

<400> 252
Ile Lys Asn Thr Ala Ala Ser Asn Lys Ala Ser Ser Leu Val Ala Leu
1 5 10 15
Val Val Arg Gly Cys Cys Tyr Asn Pro Val Cys Lys Lys Tyr Tyr Cys
20 25 30
Trp Lys Gly
35

<210> 253
<211> 148
<212> DNA
<213> Conus purpurascens

<220>
<221> CDS
<222> (1)..(117)

<400> 253 48
tct gaa ggc agg aat gct gaa gcc atc gac aac gcc tta gac cag agg
Ser Glu Gly Arg Asn Ala Glu Ala Ile Asp Asn Ala Leu Asp Gln Arg
1 5 10 15
gat cca aag cga cag gag ccg ggg tgc tgt agg cat cct gcc tgt ggg 96
Asp Pro Lys Arg Gln Glu Pro Gly Cys Cys Arg His Pro Ala Cys Gly
20 25 30
aag aac aga tgt gga aga cgc tgatgctcca ggaccctctg aaccacgacg t 148
Lys Asn Arg Cys Gly Arg Arg
35

<210> 254

93

<211> 39
<212> PRT
<213> Conus purpurascens

<400> 254
Ser Glu Gly Arg Asn Ala Glu Ala Ile Asp Asn Ala Leu Asp Gln Arg
1 5 10 15
Asp Pro Lys Arg Gln Glu Pro Gly Cys Cys Arg His Pro Ala Cys Gly
20 25 30
Lys Asn Arg Cys Gly Arg Arg
35

<210> 255
<211> 156
<212> DNA
<213> Conus musicus

<220>
<221> CDS
<222> (1)..(102)

<400> 255
tct gat ggc agg aat att gca gtc gac gac aga tgg tct ttc tat acg 48
Ser Asp Gly Arg Asn Ile Ala Val Asp Asp Arg Trp Ser Phe Tyr Thr
1 5 10 15
ctc ttc cat gct act tgc tgt gco gat cct gac tgt aga ttc cgg ccc 96
Leu Phe His Ala Thr Cys Cys Ala Asp Pro Asp Cys Arg Phe Arg Pro
20 25 30
ggg tgt tgatcttgt tcttcaaaga cgctgctggc ccaggaccct ctgaaccacg 152
Gly Cys
acgt 156

<210> 256
<211> 34
<212> PRT
<213> Conus musicus

<400> 256
Ser Asp Gly Arg Asn Ile Ala Val Asp Asp Arg Trp Ser Phe Tyr Thr
1 5 10 15
Leu Phe His Ala Thr Cys Cys Ala Asp Pro Asp Cys Arg Phe Arg Pro
20 25 30
Gly Cys

<210> 257
<211> 142
<212> DNA
<213> Conus musicus

<220>
<221> CDS
<222> (1)..(102)

<400> 257
 atc aag aat act gca gcc agc aac aaa gcg cct agc ctg gtg oct att 48
 Ile Lys Asn Thr Ala Ala Ser Asn Lys Ala Pro Ser Leu Val Ala Ile
 1 5 10 15

gcc gtc agg gga tgc tgt tac aat cct tcc tgt tgg ccg aaa aca tat 96
 Ala Val Arg Gly Cys Cys Tyr Asn Pro Ser Cys Trp Pro Lys Thr Tyr
 20 25 30

tgt agt tggaaaggct gatgctccag gaccctctga accacgacgt 142
 Cys Ser

<210> 258
 <211> 34
 <212> PRT
 <213> Conus musicus

<400> 258
 Ile Lys Asn Thr Ala Ala Ser Asn Lys Ala Pro Ser Leu Val Ala Ile 15
 1 5 10 15
 Ala Val Arg Gly Cys Cys Tyr Asn Pro Ser Cys Trp Pro Lys Thr Tyr
 20 25 30
 Cys Ser

<210> 259
 <211> 161
 <212> DNA
 <213> Conus musicus

<220>
 <221> CDS
 <222> (1)...(108)

<400> 259
 tct gat agc agg aat gtc gca atc gag gac aga gtg tct gac ctg cac 48
 Ser Asp Ser Arg Asn Val Ala Ile Glu Asp Arg Val Ser Asp Leu His
 1 5 10 15

tct atg ttc ttc gat gtt tct tgc tgt agc aat cct acc tgt aaa gaa 96
 Ser Met Phe Phe Asp Val Ser Cys Cys Ser Asn Pro Thr Cys Lys Glu
 20 25 30

acg tat ggt tgt tgatcggtgg ttttgaagac gctgatgctc caggaccctc 148
 Thr Tyr Gly Cys
 35

tgaaccacga cgt 161

<210> 260
 <211> 36
 <212> PRT
 <213> Conus musicus

<400> 260
 Ser Asp Ser Arg Asn Val Ala Ile Glu Asp Arg Val Ser Asp Leu His 15
 1 5 10 15

Ser Met Phe Phe Asp Val Ser Cys Cys Ser Asn Pro Thr Cys Lys Glu

95

25

30

Thr Tyr Gly Cys
35

<210> 261
<211> 156
<212> DNA
<213> *Conus musicus*

<220>
<221> CDS
<222> (1)..(102)

<400> 261
tct gtt ggc agg aat att gca gtc gac gac aga ggg att ttc tct acg 48
Ser Val Gly Arg Asn Ile Ala Val Asp Asp Arg Gly Ile Phe Ser Thr
1 5 10 / 15

ctc ttc cat gct cat tgc tgt gcc aat ccc atc tgt aaa aac acg ccc 96
 Leu Phe His Ala His Cys Cys Ala Asn Pro Ile Cys Lys Asn Thr Pro
 20 25 30

ggt tgt tgatcttgc tcttcaaaga cgctgtggc ccaggaccct ctgaaccacg 152
Gly Cys

acgt / 156

<210> 262
<211> 34
<212> PRT
<213> *Conus musicus*

Leu Phe His Ala His Cys Cys / Ala Asn Pro Ile Cys Lys Asn Thr Pro
 20 25 30

Gly Cys

<210> 263
<211> 161
<212> DNA
<213> *Conus musicus*

<220>
<221> CDS
<222> (1)..(108)

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<400> 263
tcc gat ggc agg aat gtc gca atc gac gac aga gtg tct gac ctg cac 48
Ser Asp Gly Arg Asn Val Ala Ile Asp Asp Arg Val Ser Asp Leu His
   1           5           10          15

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tct atg ttc ttc gat att gct tgc tgt aac aat cct acc tgt aaa gaa	96
Ser Met Phe Phe Asp Ile Ala Cys Cys Asn Asn Pro Thr Cys Lys Glu	
20 25 30	

96

acg tat ggt tgt tgatcggtgg ttttgaagac gctgatgctc caggaccctc 148
Thr Tyr Gly Cys
35

tgaaccacga cgt 161

<210> 264
<211> 36
<212> PRT
<213> Conus musicus

<400> 264
Ser Asp Gly Arg Asn Val Ala Ile Asp Asp Arg Val Ser Asp Leu His
1 5 10 15

Ser Met Phe Phe Asp Ile Ala Cys Cys Asn Asn Pro Thr Cys Lys Glu
20 25 30

Thr Tyr Gly Cys
35

<210> 265
<211> 161
<212> DNA
<213> Conus musicus

<220>
<221> CDS
<222> (1)..(108)

<400> 265
tct gat ggc agg aat gtc gca atc gag gac aga gtg tct gac ctg ctc 48
Ser Asp Gly Arg Asn Val Ala Ile Glu Asp Arg Val Ser Asp Leu Leu
1 5 10 15

tct atg ctc ttc gat gtt gct cgc tgt agc aat cct gtc tgt aaa gaa 96
Ser Met Leu Phe Asp Val Ala Cys Cys Ser Asn Pro Val Cys Lys Glu
20 25 30

acg tat ggt tgt tgatcggtgg ttttgaagac gctgatgctc caggaccctc 148
Thr Tyr Gly Cys
35

tgaaccacga cgt 161

<210> 266
<211> 36
<212> PRT
<213> Conus musicus

<400> 266
Ser Asp Gly Arg Asn Val Ala Ile Glu Asp Arg Val Ser Asp Leu Leu
1 5 10 15

Ser Met Leu Phe Asp Val Ala Cys Cys Ser Asn Pro Val Cys Lys Glu
20 25 30

Thr Tyr Gly Cys
35

<210> 267
 <211> 154
 <212> DNA
 <213> Conus betulinus

 <220>
 <221> CDS
 <222> (1)..(123)

 <400> 267 48
 tat gat ggc agg aat gct gcc gcc gac gac aaa gct ttt gac ctg ctg
 Tyr Asp Gly Arg Asn Ala Ala Ala Asp Asp Lys Ala Phe Asp Leu Leu
 1 5 10 15

 gct atg acc ata agg gga gga tgc tgt tcc tat cct ccc tgt atc gcg 96
 Ala Met Thr Ile Arg Gly Gly Cys Cys Ser Tyr Pro Pro Cys Ile Ala
 20 25 30

 agt aat cct aaa tgt ggt gga aga cgc tgatgctcca ggaccctctg 143
 Ser Asn Pro Lys Cys Gly Gly Arg Arg
 35 40

 aaccacaacg t 154

 <210> 268
 <211> 41
 <212> PRT
 <213> Conus betulinus

 <400> 268
 Tyr Asp Gly Arg Asn Ala Ala Ala Asp Asp Lys Ala Phe Asp Leu Leu
 1 5 10 15

 Ala Met Thr Ile Arg Gly Gly Cys Cys Ser Tyr Pro Pro Cys Ile Ala
 20 25 30

 Ser Asn Pro Lys Cys Gly Gly Arg Arg
 35 40

 <210> 269
 <211> 151
 <212> DNA
 <213> Conus lividus

 <220>
 <221> CDS
 <222> (1)..(111)

 <400> 269 48
 ttt gat ggc agg aat gct gca ggc aac gcc aaa atg tcc gcc ctg atg
 Phe Asp Gly Arg Asn Ala Ala Gly Asn Ala Lys Met Ser Ala Leu Met
 1 5 10 15

 gcc ctg acc atc agg gga tgc tgt tcc cat cct gtc tgt agc gcg atg 96
 Ala Leu Thr Ile Arg Gly Cys Cys Ser His Pro Val Cys Ser Ala Met
 20 25 30

 agt cca atc tgt ggc tgaagacgct gatgccccag gaccctctga accacgacgt 151
 Ser Pro Ile Cys Gly
 35

<210> 270
<211> 37
<212> PRT
<213> Conus lividus

<400> 270
Phe Asp Gly Arg Asn Ala Ala Gly Asn Ala Lys Met Ser Ala Leu Met
1 5 10 15
Ala Leu Thr Ile Arg Gly Cys Cys Ser His Pro Val Cys Ser Ala Met
20 25 30
Ser Pro Ile Cys Gly
35

<210> 271
<211> 196
<212> DNA
<213> Conus musicus

<220>
<221> CDS
<222> (1)..(165)

<400> 271
atc aag aat gct gca gct gac gac aaa gca tct gac ctg ctc tct cag 48
Ile Lys Asn Ala Ala Asp Asp Lys Ala Ser Asp Leu Leu Ser Gln
1 5 10 15
atc gtc agg aat gct gca tcc aat gac aaa ggg tct gac ctg atg act 96
Ile Val Arg Asn Ala Ala Ser Asn Asp Lys Gly Ser Asp Leu Met Thr
20 25 30
ctt gcc ctc agg gga tgc tgt aaa aat cct tac tgt ggt gcg tcg aaa 144
Leu Ala Leu Arg Gly Cys Cys Lys Asn Pro Tyr Cys Gly Ala Ser Lys
35 40 45
aca tat tgt ggt aga aga cgc tgatgctcca ggaccctctg aaccacgacg t 196
Thr Tyr Cys Gly Arg Arg Arg
50 55

<210> 272
<211> 55
<212> PRT
<213> Conus musicus

<400> 272
Ile Lys Asn Ala Ala Ala Asp Asp Lys Ala Ser Asp Leu Leu Ser Gln
1 5 10 15
Ile Val Arg Asn Ala Ala Ser Asn Asp Lys Gly Ser Asp Leu Met Thr
20 25 30
Leu Ala Leu Arg Gly Cys Cys Lys Asn Pro Tyr Cys Gly Ala Ser Lys
35 40 45
Thr Tyr Cys Gly Arg Arg Arg
50 55

<210> 273
<211> 139

99

<212> DNA
<213> Conus omaria

<220>
<221> CDS
<222> (40)..(108)

<400> 273

tctgatggca ggaatgccgc agcgtctgac ctgatggat ctg acc atc aag gga 54
Leu Thr Ile Lys Gly
1 5

tgc tgt tct tat cct ccc tgt ttc gcg act aat cca gac tgt ggt cga 102
Cys Cys Ser Tyr Pro Pro Cys Phe Ala Thr Asn Pro Asp Cys Gly Arg
10 15 20

cga cgc tgatgctcca ggaccctctg aaccacgacg t 139
Arg Arg

<210> 274

<211> 23
<212> PRT
<213> Conus omaria

<400> 274

Leu Thr Ile Lys Gly Cys Cys Ser Tyr Pro Pro Cys Phe Ala Thr Asn 1 5 10 15

Pro Asp Cys Gly Arg Arg Arg 20

<210> 275

<211> 126
<212> DNA
<213> Conus radiatus

<220>

<221> CDS
<222> (1)..(123)

<400> 275

ttt gat ggc agg aat gcc gca gcc gac tac aaa ggg tct gaa ttg ctc 48
Phe Asp Gly Arg Asn Ala Ala Asp Tyr Lys Gly Ser Glu Leu Leu
1 5 10 15

gct atg acc gtc agg gga gga tgc tgt tcc tat cct ccc tgt atc gca 96
Ala Met Thr Val Arg Gly Gly Cys Cys Ser Tyr Pro Pro Cys Ile Ala
20 25 30

aat aat cct ctt tgt gct gga aga cgc tga 126
Asn Asn Pro Leu Cys Ala Gly Arg Arg
35 40

<210> 276

<211> 41
<212> PRT
<213> Conus radiatus

<400> 276

Phe Asp Gly Arg Asn Ala Ala Asp Tyr Lys Gly Ser Glu Leu Leu 1 5 10 15

100

Ala Met Thr Val Arg Gly Gly Cys Cys Ser Tyr Pro Pro Cys Ile Ala
20 25 30

Asn Asn Pro Leu Cys Ala Gly Arg Arg
35 40

<210> 277
<211> 126
<212> DNA
<213> Conus radiatus

<220>
<221> CDS
<222> (1)..(123)

<400> 277
ttt gat ggc agg aat gcc gca gcc gac tac aaa ggg tct gaa ttg ctc 48
Phe Asp Gly Arg Asn Ala Ala Ala Asp Tyr Lys Gly Ser Glu Leu Leu
1 5 10 15

gct atg acc gtc agg gga gga tgc tgt tcc tat cct ccc tgt atc gca 96
Ala Met Thr Val Arg Gly Gly Cys Cys Ser Tyr Pro Pro Cys Ile Ala
20 25 30

aat aat cct ttt tgt gct gga aga / cgc tga 126
Asn Asn Pro Phe Cys Ala Gly Arg Arg
35 40

<210> 278
<211> 41
<212> PRT
<213> Conus radiatus

<400> 278
Phe Asp Gly Arg Asn Ala Ala Ala Asp Tyr Lys Gly Ser Glu Leu Leu
1 5 10 15

Ala Met Thr Val Arg Gly Gly Cys Cys Ser Tyr Pro Pro Cys Ile Ala
20 25 30

Asn Asn Pro Phe Cys Ala Gly Arg Arg
35 40

<210> 279
<211> 155
<212> DNA
<213> Conus virgo

<220>
<221> CDS
<222> (1)..(114)

<400> 279
tct tat gac agg tat gcc tcg ccc gtc gac aga gcg tct gcc ctg atc 48
Ser Tyr Asp Arg Tyr Ala Ser Pro Val Asp Arg Ala Ser Ala Leu Ile
1 5 10 15

gct cag gcc atc ctt cga gat tgc tgt tcc aat cct ccc tgt tcc caa 96
Ala Gln Ala Ile Leu Arg Asp Cys Cys Ser Asn Pro Pro Cys Ser Gln
20 25 30

101

aat aat cca gac tgt atg taaagacgct gcttgctcca ggaccctctg
Asn Asn Pro Asp Cys Met
35

144

aaccacgacg t
155

<210> 280
<211> 38
<212> PRT
<213> Conus virgo

<400> 280
Ser Tyr Asp Arg Tyr Ala Ser Pro Val Asp Arg Ala Ser Ala Leu Ile
1 5 10 15
Ala Gln Ala Ile Leu Arg Asp Cys Cys Ser Asn Pro Pro Cys Ser Gln
20 25 30

Asn Asn Pro Asp Cys Met
35

<210> 281
<211> 155
<212> DNA
<213> Conus virgo

<220>
<221> CDS
<222> (1)..(114)

<400> 281
tct tat gcc agg tat gcc tca ccc gtc gac aga gcg tct gcc ctg atc 48
Ser Tyr Gly Arg Tyr Ala Ser Pro Val Asp Arg Ala Ser Ala Leu Ile
1 5 10 15

gct cag gcc atc ctt cga gat tgc tgc tcc aat cct cct tgt gcc cat 96
Ala Gln Ala Ile Leu Arg Asp Cys Cys Ser Asn Pro Pro Cys Ala His
20 25 30

aat aat cca gac tgt cgt taaagacgct gcttgctcca ggaccctctg
Asn Asn Pro Asp Cys Arg
35

144

aaccacgacg t
155

<210> 282
<211> 38
<212> PRT
<213> Conus virgo

<400> 282
Ser Tyr Gly Arg Tyr Ala Ser Pro Val Asp Arg Ala Ser Ala Leu Ile
1 5 10 15
Ala Gln Ala Ile Leu Arg Asp Cys Cys Ser Asn Pro Pro Cys Ala His
20 25 30

Asn Asn Pro Asp Cys Arg
35

102

<210> 283
<211> 126
<212> DNA
<213> Conus achatinus

<220>
<221> CDS
<222> (1)..(123)

<400> 283

tct	gat	ggc	agg	aat	gcc	gca	gcc	aac	gac	aaa	gog	tct	ggc	atg	agc	48
Ser	Asp	Gly	Arg	Asn	Ala	Ala	Ala	Asn	Asp	Lys	Ala	Ser	Gly	Met	Ser	
1					5				10					15		

gcg ctg gcc gtc aat gaa tgc tgt acc aac cct gtc tgt cac gcg gaa 96

Ala	Leu	Ala	Val	Asn	Glu	Cys	Cys	Thr	Asn	Pro	Val	Cys	His	Ala	Glu	
						20			25				30			

cat caa gaa ctt tgt gct aga aga cgc tga 126

His	Gln	Glu	Leu	Cys	Ala	Arg	Arg	Arg	40							
					35											

<210> 284
<211> 41
<212> PRT
<213> Conus achatinus

<400> 284

Ser	Asp	Gly	Arg	Asn	Ala	Ala	Ala	Asn	Asp	Lys	Ala	Ser	Gly	Met	Ser	48
1					5				10					15		

Ala Leu Ala Val Asn Glu Cys Cys Thr Asn Pro Val Cys His Ala Glu 30

			20				25									
His	Gln	Glu	Leu	Cys	Ala	Arg	Arg	Arg	40							
					35											

<210> 285
<211> 126
<212> DNA
<213> Conus achatinus

<220>
<221> CDS
<222> (1)..(123)

<400> 285

tct	gat	ggc	agg	aat	gcc	gca	gcc	aac	gac	aaa	gog	tct	gac	gtg	atc	48
Ser	Asp	Gly	Arg	Asn	Ala	Ala	Ala	Asn	Asp	Lys	Ala	Ser	Asp	Val	Ile	
1					5				10					15		

acg ctg gcc ctc aag gga tgc tgt tcc aac cct gtc tgt cac ttg gag 96

Thr	Leu	Ala	Leu	Lys	Gly	Cys	Cys	Ser	Asn	Pro	Val	Cys	His	Leu	Glu	
				20				25					30			

cat tca aac ctt tgt ggt aga aga cgc tga 126

His	Ser	Asn	Leu	Cys	Gly	Arg	Arg	Arg	40							
					35											

<210> 286
<211> 41

103

<212> PRT
<213> Conus achatinus

<400> 286
Ser Asp Gly Arg Asn Ala Ala Ala Asn Asp Lys Ala Ser Asp Val Ile
1 5 10 15
Thr Leu Ala Leu Lys Gly Cys Cys Ser Asn Pro Val Cys His Leu Glu
20 25 30
His Ser Asn Leu Cys Gly Arg Arg Arg
35 40

<210> 287
<211> 126
<212> DNA
<213> Conus achatinus

<220>
<221> CDS
<222> (1)..(123)

<400> 287
tct gat ggc agg aat gcc gca gcc aac gac aaa gcg tct ggc atg agc 48
Ser Asp Gly Arg Asn Ala Ala Ala Asn Asp Lys Ala Ser Gly Met Ser
1 5 10 15
gcg ctg gcc gtc aat gaa tgc tgt acc aac cct gtc tgt cac gtg gaa 96
Ala Leu Ala Val Asn Glu Cys Cys Thr Asn Pro Val Cys His Val Glu
20 25 30
cat caa gaa ctt tgt gct aga aga cgc tga
His Gln Glu Leu Cys Ala Arg Arg Arg
35 40

<210> 288
<211> 41
<212> PRT
<213> Conus achatinus

<400> 288
Ser Asp Gly Arg Asn Ala Ala Ala Asn Asp Lys Ala Ser Gly Met Ser
1 5 10 15
Ala Leu Ala Val Asn Glu Cys Cys Thr Asn Pro Val Cys His Val Glu
20 25 30
His Gln Glu Leu Cys Ala Arg Arg Arg
35 40

<210> 289
<211> 220
<212> DNA
<213> Conus ammiralis

<220>
<221> CDS
<222> (1)..(180)

<400> 289
atg ttc acc gtg ttt ctg ttg gtc ttg gca acc acc gtc gtt tcc 48

Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser
 1 5 10 15

ttc act tca gat cgt gca ttt cgt ggc agg aat gcc gca gcc aaa gcg 96
 Phe Thr Ser Asp Arg Ala Phe Arg Gly Arg Asn Ala Ala Ala Lys Ala
 20 25 30

tct ggc ctg gtc ggt ctg acc gac aag agg caa gaa tgc tgt tct tat 144
 Ser Gly Leu Val Gly Leu Thr Asp Lys Arg Gln Glu Cys Cys Ser Tyr
 35 40 45

cct gcc tgt aac cta gat cat cca gaa ctt tgt ggt tgaagacgct 190
 Pro Ala Cys Asn Leu Asp His Pro Glu Leu Cys Gly
 50 55 60

gatgctccag gaccctctga accacgacgt 220

<210> 290
 <211> 60
 <212> PRT
 <213> Conus ammiralis

<400> 290
 Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser
 1 5 10 15

Phe Thr Ser Asp Arg Ala Phe Arg Gly Arg Asn Ala Ala Ala Lys Ala
 20 25 30

Ser Gly Leu Val Gly Leu Thr Asp Lys Arg Gln Glu Cys Cys Ser Tyr
 35 40 45

Pro Ala Cys Asn Leu Asp His Pro Glu Leu Cys Gly
 50 55 60

<210> 291
 <211> 223
 <212> DNA
 <213> Conus ammiralis

<220>
 <221> CDS
 <222> (1)...(192)

<400> 291
 atg ttc acc gtg ttt ctg ttg gtt gtc ttg gca acc act gtc gtt tcc 48
 Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser
 1 5 10 15

tcc act tca ggt cgt cgt gca ttt cgt ggc agg aat gcc gca gcc aaa 96
 Ser Thr Ser Gly Arg Arg Ala Phe Arg Gly Arg Asn Ala Ala Ala Lys
 20 25 30

gcg tct gga ctg gtc ggt ctg act gac agg aga cca gaa tgc tgt agt 144
 Ala Ser Gly Leu Val Gly Leu Thr Asp Arg Arg Pro Glu Cys Cys Ser
 35 40 45

gat cct cgc tgt aac tcg act cat cca gaa ctt tgt ggt gga aga cgc 192
 Asp Pro Arg Cys Asn Ser Thr His Pro Glu Leu Cys Gly Gly Arg Arg
 50 55 60

tgatgctcca ggaccctctg aaccacgacg t 223

<210> 292

<211> 64

<212> PRT

<213> Conus ammiralis

<400> 292

Met	Phe	Thr	Val	Phe	Leu	Leu	Val	Val	Leu	Ala	Thr	Thr	Val	Val	Ser
1				5					10					15	

Ser	Thr	Ser	Gly	Arg	Arg	Ala	Phe	Arg	Gly	Arg	Asn	Ala	Ala	Ala	Lys
			20					25					30		

Ala	Ser	Gly	Leu	Val	Gly	Leu	Thr	Asp	Arg	Arg	Pro	Glu	Cys	Cys	Ser
			35				40					45			

Asp	Pro	Arg	Cys	Asn	Ser	Thr	His	Pro	Glu	Leu	Cys	Gly	Gly	Arg	Arg
						50		55			60				

<210> 293

<211> 151

<212> DNA

<213> Conus arenatus

<220>

<221> CDS

<222> (1)..(120)

<400> 293

tct	gat	ggc	agg	aat	gcc	gca	gcc	aac	gcg	ttt	gac	ctg	atc	gat	ctg	48
Ser	Asp	Gly	Arg	Asn	Ala	Ala	Ala	Asn	Ala	Phe	Asp	Leu	Ile	Asp	Leu	
1					5				10				15			

acc	gcc	agg	cta	aat	tgc	tgt	atg	att	ccc	ccc	tgt	tgg	aag	aaa	tat	96
Thr	Ala	Arg	Leu	Asn	Cys	Cys	Met	Ile	Pro	Pro	Cys	Trp	Lys	Lys	Tyr	
				20				25				30				

gga	gac	aga	tgt	agt	gaa	gta	cgc	tgatgctcca	ggaccctctg	aaccacgacg	150
Gly	Asp	Arg	Cys	Ser	Glu	Val	Arg				
				35			40				

t	151
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<210> 294

<211> 40

<212> PRT

<213> Conus arenatus

<400> 294

Ser	Asp	Gly	Arg	Asn	Ala	Ala	Ala	Asn	Ala	Phe	Asp	Leu	Ile	Asp	Leu
1					5				10				15		

Thr	Ala	Arg	Leu	Asn	Cys	Cys	Met	Ile	Pro	Pro	Cys	Trp	Lys	Lys	Tyr
				20				25				30			

Gly	Asp	Arg	Cys	Ser	Glu	Val	Arg							
				35			40							

<210> 295

<211> 126

<212> DNA

<213> Conus arenatus

<220>

<221> CDS

<222> (1)...(93)

<400> 295

tct	aat	gac	ttt	ggc	tgc	tgc	gac	tta	48						
Ser	Gly	Arg	Asn	Ala	Ala	Arg	Lys	Ala	Phe	Gly	Cys	Cys	Asp	Leu	
1	5			10				15							

ata	ccc	tgt	ttg	gag	aga	tat	ggt	aac	aga	tgt	aat	gaa	gtg	cac	93
Ile	Pro	Cys	Leu	Glu	Arg	Tyr	Gly	Asn	Arg	Cys	Asn	Glu	Val	His	
20				25									30		

tgatgctcca	ggaccctctg	aaccacgca	cgt	126
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<210> 296

<211> 31

<212> PRT

<213> Conus arenatus

<400> 296

Ser	Asp	Gly	Arg	Asn	Ala	Ala	Arg	Lys	Ala	Phe	Gly	Cys	Cys	Asp	Leu
1				5				10				15			

Ile	Pro	Cys	Leu	Glu	Arg	Tyr	Gly	Asn	Arg	Cys	Asn	Glu	Val	His
20				25								30		

<210> 297

<211> 151

<212> DNA

<213> Conus arenatus

<220>

<221> CDS

<222> (1)...(120)

<400> 297

tct	aat	gcc	gca	gcc	aac	gag	ttt	gac	ctg	atc	gct	ctg	48	
Ser	Gly	Ser	Asn	Ala	Ala	Asn	Glu	Phe	Asp	Leu	Ile	Ala	Leu	
1				5			10				15			

acc	gcc	agg	cta	ggt	tgc	tgt	aac	gtt	aca	ccc	tgt	tgg	gag	aaa	tat
Thr	Ala	Arg	Leu	Gly	Cys	Cys	Asn	Val	Thr	Pro	Cys	Trp	Glu	Lys	Tyr
20				25								30			

gga	gac	aaa	tgt	aat	gaa	gta	cgc	tgatgcttca	ggaccctctg	aaccacgacg	150
Gly	Asp	Lys	Cys	Asn	Glu	Val	Arg				
35				40							

t	151
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<210> 298

<211> 40

<212> PRT

<213> Conus arenatus

<400> 298

Ser	Asp	Gly	Ser	Asn	Ala	Ala	Asn	Glu	Phe	Asp	Leu	Ile	Ala	Leu
1				5				10				15		

Thr Ala Arg Leu Gly Cys Cys Asn Val Thr Pro Cys Trp Glu Lys Tyr
 20 25 30

Gly Asp Lys Cys Asn Glu Val Arg
 35 40

<210> 299
<211> 148
<212> DNA
<213> Conus arenatus

<220>
<221> CDS
<222> (1)..(117)

<400> 299
tct gat ggc agg aat gtc gca gca aaa gcg ttt cac cgg atc ggc cg 48
Ser Asp Gly Arg Asn Val Ala Ala Lys Ala Phe His Arg Ile Gly Arg
 1 5 10 15
acc atc agg gat gaa tgc tgt tcc aat cct gcc tgt agg gtg aat aat 96
Thr Ile Arg Asp Glu Cys Cys Ser Asn Pro Ala Cys Arg Val Asn Asn
 20 25 30
cca cac gtt tgt aga cga cgc tgatgctcca ggaccctctg aaccacgacg t 148
Pro His Val Cys Arg Arg Arg
 35

<210> 300
<211> 39
<212> PRT
<213> Conus arenatus

<400> 300
Ser Asp Gly Arg Asn Val Ala Ala Lys Ala Phe His Arg Ile Gly Arg
 1 5 10 15
Thr Ile Arg Asp Glu Cys Cys Ser Asn Pro Ala Cys Arg Val Asn Asn
 20 25 30
Pro His Val Cys Arg Arg Arg
 35

<210> 301
<211> 151
<212> DNA
<213> Conus arenatus

<220>
<221> CDS
<222> (1)..(120)

<400> 301
tct gat ggc agg aat gcc gca gcc aac gcg ttt gac ctg atg cct ctg 48
Ser Asp Gly Arg Asn Ala Ala Ala Asn Ala Phe Asp Leu Met Pro Leu
 1 5 10 15
acc gcc agg cta aat tgc tgt agc att ccc ggc tgt tgg aac gaa tat 96
Thr Ala Arg Leu Asn Cys Cys Ser Ile Pro Gly Cys Trp Asn Glu Tyr
 20 25 30

aaa gac aga tgt agt aaa gta cgc tgatgctcca ggaccctctg aaccacgacg 150
 Lys Asp Arg Cys Ser Lys Val Arg
 35 40

t 151

<210> 302
 <211> 40
 <212> PRT
 <213> Conus arenatus

<400> 302
 Ser Asp Gly Arg Asn Ala Ala Ala Asn Ala Phe Asp Leu Met Pro Leu
 1 5 10 15

Thr Ala Arg Leu Asn Cys Cys Ser Ile Pro Gly Cys Trp Asn Glu Tyr
 20 25 30

Lys Asp Arg Cys Ser Lys Val Arg
 35 40

<210> 303
 <211> 157
 <212> DNA
 <213> Conus aurisiacus

<220>
 <221> CDS
 <222> (52)..(126)

<400> 303
 tctgatggca ggaatgccgc agccgacgac aaagcgtctg acctggtcgc t ctg gtc 57
 Leu Val
 1

gtc agg gga tgc tgt tcc cac cct gtc tgt tac ttt aat aat cca 105
 Val Arg Gly Gly Cys Cys Ser His Pro Val Cys Tyr Phe Asn Asn Pro
 5 10 15

caa atg tgt cgt gga aga cgc tgatgctcca ggaccctctg aaccacgacg t 157
 Gln Met Cys Arg Gly Arg Arg
 20 25

<210> 304
 <211> 25
 <212> PRT
 <213> Conus aurisiacus

<400> 304
 Leu Val Val Arg Gly Gly Cys Cys Ser His Pro Val Cys Tyr Phe Asn
 1 5 10 15

Asn Pro Gln Met Cys Arg Gly Arg Arg
 20 25

<210> 305
 <211> 157
 <212> DNA
 <213> Conus aurisiacus

<220>
<221> CDS
<222> (52)..(126)

<400> 305
tctgatggca ggaatgccgc agccgacgac aaagcgtctg acctggtcgc t ctg gcc 57
Leu Ala
1
gtc agg gga gga tgc tgt tcc cac cct gtc tgt aac ttg aat aat cca 105
Val Arg Gly Gly Cys Cys Ser His Pro Val Cys Asn Leu Asn Asn Pro
5 10 15
caa atg tgt cgt gga aga cgc tgatgctcca ggaccctctg aaccacgacg t 157
Gln Met Cys Arg Gly Arg Arg
20 25

<210> 306
<211> 25
<212> PRT
<213> Conus aurisiacus

<400> 306
Leu Ala Val Arg Gly Gly Cys Cys Ser His Pro Val Cys Asn Leu Asn
1 5 10 15
Asn Pro Gln Met Cys Arg Gly Arg Arg
20 25

<210> 307
<211> 157
<212> DNA
<213> Conus betulinus

<220>
<221> CDS
<222> (1)..(117)

<400> 307
ttt cgt ggc agg aat ccc gca gcc aac gac aaa agg tct gac ctg gcc 48
Phe Arg Gly Arg Asn Pro Ala Ala Asn Asp Lys Arg Ser Asp Leu Ala
1 5 10 15
gct ctg agc gtc agg gga gga tgc tgt tcc cat cct gcc tgt agc gtg 96
Ala Leu Ser Val Arg Gly Gly Cys Cys Ser His Pro Ala Cys Ser Val
20 25 30
act cat cca gag ctt tgt ggc tgaagacgct gatgccccag gaccctctga 147
Thr His Pro Glu Leu Cys Gly
35
accacgacgt 157

<210> 308
<211> 39
<212> PRT
<213> Conus betulinus

<400> 308
Phe Arg Gly Arg Asn Pro Ala Ala Asn Asp Lys Arg Ser Asp Leu Ala
1 5 10 15

Ala Leu Ser Val Arg Gly Gly Cys Cys Ser His Pro Ala Cys Ser Val
 20 25 30

Thr His Pro Glu Leu Cys Gly
 35

<210> 309
 <211> 151
 <212> DNA
 <213> Conus betulinus

<220>
 <221> CDS
 <222> (1)..(120)

<400> 309
 tct gat ggc ggg aat gcc gca aaa gcg tct gac ctg atc gct cag 48
 Ser Asp Gly Gly Asn Ala Ala Lys Ala Ser Asp Leu Ile Ala Gln
 1 5 10 15

acc atc agg gga gga tgc tgt tcc tat cct gcc tgt agc gtg gaa cat 96
 Thr Ile Arg Gly Gly Cys Cys Ser Tyr Pro Ala Cys Ser Val Glu His
 20 25 30

caa gac ctt tgt gat gga aga cgc tgatgtccca ggaccctctg aaccacgacg 150
 Gln Asp Leu Cys Asp Gly Arg Arg
 35 40

t 151

<210> 310
 <211> 40
 <212> PRT
 <213> Conus betulinus

<400> 310
 Ser Asp Gly Gly Asn Ala Ala Lys Ala Ser Asp Leu Ile Ala Gln
 1 5 10 15

Thr Ile Arg Gly Gly Cys Cys Ser Tyr Pro Ala Cys Ser Val Glu His
 20 25 30

Gln Asp Leu Cys Asp Gly Arg Arg
 35 40

<210> 311
 <211> 114
 <212> DNA
 <213> Conus characteristicus

<220>
 <221> CDS
 <222> (1)..(111)

<400> 311
 tct tat ggc agg aat gcc gca aaa gcg ttt gaa gtg agt tgc tgt 48
 Ser Tyr Gly Arg Asn Ala Ala Lys Ala Phe Glu Val Ser Cys Cys
 1 5 10 15

gtc gtt cgc ccc tgt tgg att cgc tat caa gag gaa tgt ctt gaa gca 96
 Val Val Arg Pro Cys Trp Ile Arg Tyr Gln Glu Glu Cys Leu Glu Ala

20

25

30

114

gat ccc agg acc ctc tga
 Asp Pro Arg Thr Leu
 35

<210> 312
<211> 37
<212> PRT
<213> Conus characteristicus

<400> 312
 Ser Tyr Gly Arg Asn Ala Ala Ala Lys Ala Phe Glu Val Ser Cys Cys
 1 5 10 15

Val Val Arg Pro Cys Trp Ile Arg Tyr Gln Glu Glu Cys Leu Glu Ala
 20 25 30

Asp Pro Arg Thr Leu
 35

<210> 313
<211> 123
<212> DNA
<213> Conus characteristicus

<220>
<221> CDS
<222> (1)..(120)

<400> 313
 tct gat ggc agg aat gcc gca gcc aac gcc ctt gac ctg atc act ctg 48
 Ser Asp Gly Arg Asn Ala Ala Asn Ala Leu Asp Leu Ile Thr Leu
 1 5 10 15

atc gcc agg caa aat tgc tgt agc att ccc ggc tgt tgg gag aaa tat 96
 Ile Ala Arg Gln Asn Cys Cys Ser Ile Pro Gly Cys Trp Glu Lys Tyr
 20 25 30

gga gac aaa tgt agt gaa gta cgc tga 123
 Gly Asp Lys Cys Ser Glu Val Arg
 35 40

<210> 314
<211> 40
<212> PRT
<213> Conus characteristicus

<400> 314
 Ser Asp Gly Arg Asn Ala Ala Ala Asn Ala Leu Asp Leu Ile Thr Leu
 1 5 10 15

Ile Ala Arg Gln Asn Cys Cys Ser Ile Pro Gly Cys Trp Glu Lys Tyr
 20 25 30

Gly Asp Lys Cys Ser Glu Val Arg
 35 40

<210> 315
<211> 154

<212> DNA
 <213> Conus catus

<220>
 <221> CDS
 <222> (1)..(123)

<400> 315

tct gat ggc agg aat gaa gca gcc aac gac gaa gcg tct gac gtg atc	48
Ser Asp Gly Arg Asn Glu Ala Ala Asn Asp Glu Ala Ser Asp Val Ile	
1 5 10 15	

gag ctg gcc ctc aag gga tgc tgt tcc aac cct gtc tgt cac ttg gag 96

Glu Leu Ala Leu Lys Gly Cys Cys Ser Asn Pro Val Cys His Leu Glu	
20 25 30	

cat cca aac gct tgt ggt aga aga cgc tgatgctcca ggaccctctg 143

His Pro Asn Ala Cys Gly Arg Arg Arg	
35 40	

aaccacgacg t 154

<210> 316
 <211> 41
 <212> PRT
 <213> Conus catus

<400> 316

Ser Asp Gly Arg Asn Glu Ala Ala Asn Asp Glu Ala Ser Asp Val Ile	
1 5 10 15	

Glu Leu Ala Leu Lys Gly Cys Cys Ser Asn Pro Val Cys His Leu Glu 30

20 25 30	
----------	--

His Pro Asn Ala Cys Gly Arg Arg Arg

35 40	
-------	--

<210> 317
 <211> 154
 <212> DNA
 <213> Conus catus

<220>
 <221> CDS
 <222> (1)..(123)

<400> 317

tct gat ggc agg aat gcc gca gcc aac gac aaa gcg tct gac ctg gtc	48
Ser Asp Gly Arg Asn Ala Ala Asn Asp Lys Ala Ser Asp Leu Val	
1 5 10 15	

gct ctg gcc gtc agg gga tgc tgt tcc aac cct atc tgt tac ttt aat 96

Ala Leu Ala Val Arg Gly Cys Cys Ser Asn Pro Ile Cys Tyr Phe Asn	
20 25 30	

aat cca cga att tgt cgt gga aga cgc tgatgctcca ggaccctctg 143

Asn Pro Arg Ile Cys Arg Gly Arg Arg	
35 40	

aaccacgacg t 154

<210> 318
<211> 41
<212> PRT
<213> Conus catus

<400> 318
Ser Asp Gly Arg Asn Ala Ala Ala Asn Asp Lys Ala Ser Asp Leu Val
1 5 10 15
Ala Leu Ala Val Arg Gly Cys Cys Ser Asn Pro Ile Cys Tyr Phe Asn
20 25 30
Asn Pro Arg Ile Cys Arg Gly Arg Arg
35 40

<210> 319
<211> 111
<212> DNA
<213> Conus episcopatus

<220>
<221> CDS
<222> (1)..(108)

<400> 319
tct cat ggc agg aat gcc gca cgc aaa gcg tct gac ctg atc gct ctg 48
Ser His Gly Arg Asn Ala Ala Arg Lys Ala Ser Asp Leu Ile Ala Leu
1 5 10 15
acc gtc agg gaa tgc tgt tct cag cct ccc tgt cgc tgg aaa cat cca 96
Thr Val Arg Glu Cys Cys Ser Gln Pro Pro Cys Arg Trp Lys His Pro
20 25 30
gaa ctt tgt agt tga 111
Glu Leu Cys Ser
35

<210> 320
<211> 36
<212> PRT
<213> Conus episcopatus

<400> 320
Ser His Gly Arg Asn Ala Ala Arg Lys Ala Ser Asp Leu Ile Ala Leu
1 5 10 15
Thr Val Arg Glu Cys Cys Ser Gln Pro Pro Cys Arg Trp Lys His Pro
20 25 30
Glu Leu Cys Ser
35

<210> 321
<211> 151
<212> DNA
<213> Conus geographus

<220>
<221> CDS
<222> (1)..(120)

<400> 321
 tct gat ggc agg aat gac gca gcc aaa gcg ttt gac ctg ata tct tcg 48
 Ser Asp Gly Arg Asn Asp Ala Ala Lys Ala Phe Asp Leu Ile Ser Ser
 1 5 10 15

 acc gtc aag aaa gga tgc tgt tcc cat cct gcc tgt gcg ggg aat aat 96
 Thr Val Lys Lys Gly Cys Cys Ser His Pro Ala Cys Ala Gly Asn Asn
 20 25 30

 caa cat att tgt ggc cga aga cgc tgatgctcca ggaccctctg aaccacgacg 150
 Gln His Ile Cys Gly Arg Arg Arg
 35 40

t 151

<210> 322
 <211> 40
 <212> PRT
 <213> Conus geographus

<400> 322
 Ser Asp Gly Arg Asn Asp Ala Ala Lys Ala Phe Asp Leu Ile Ser Ser
 1 5 10 15

 Thr Val Lys Lys Gly Cys Cys Ser His Pro Ala Cys Ala Gly Asn Asn
 20 25 30

 Gln His Ile Cys Gly Arg Arg Arg
 35 40

<210> 323
 <211> 154
 <212> DNA
 <213> Conus geographus

<220>
 <221> CDS
 <222> (1)..(123)

<400> 323
 tct gat ggc agg aat gcc gca gcc aac gac caa gcg tct gac ctg atg 48
 Ser Asp Gly Arg Asn Ala Ala Asn Asp Gln Ala Ser Asp Leu Met
 1 5 10 15

 gct gcg acc gtc agg gga tgc tgt gcc gtt cct tcc tgt cgc ctc cgt 96
 Ala Ala Thr Val Arg Gly Cys Cys Ala Val Pro Ser Cys Arg Leu Arg
 20 25 30

 aat cca gac ctt tgt ggt gga gga cgc tgatgctcca ggaccctctg 143
 Asn Pro Asp Leu Cys Gly Gly Arg
 35 40

 aaccacgacg t 154

<210> 324
 <211> 41
 <212> PRT
 <213> Conus geographus

<400> 324
 Ser Asp Gly Arg Asn Ala Ala Asn Asp Gln Ala Ser Asp Leu Met

1	5	10	15
Ala Ala Thr Val Arg Gly Cys Cys Ala Val Pro Ser Cys Arg Leu Arg			
20	25	30	
Asn Pro Asp Leu Cys Gly Gly Arg			
35	40		

<210> 325
<211> 120
<212> DNA
<213> Conus imperialis

<220>
<221> CDS
<222> (1)..(117)

<400> 325
ctt gat gaa agg aat gcc gca gcc gac gac aaa gcg tct gac ctg atc 48
Leu Asp Glu Arg Asn Ala Ala Asp Asp Lys Ala Ser Asp Leu Ile
1 5 10 15
gct caa atc gtc agg aga gga tgc tgt tcc cat cct gcc tgt aac gtg 96
Ala Gln Ile Val Arg Arg Gly Cys Cys Ser His Pro Ala Cys Asn Val
20 25 30
aat aat cca cac att tgt ggt tga 120
Asn Asn Pro His Ile Cys Gly
35

<210> 326
<211> 39
<212> PRT
<213> Conus imperialis

<400> 326
Leu Asp Glu Arg Asn Ala Ala Asp Asp Lys Ala Ser Asp Leu Ile 48
1 5 10 15
Ala Gln Ile Val Arg Arg Gly Cys Cys Ser His Pro Ala Cys Asn Val
20 25 30
Asn Asn Pro His Ile Cys Gly
35

<210> 327
<211> 142
<212> DNA
<213> Conus lividus

<220>
<221> CDS
<222> (1)..(111)

<400> 327
tct gat ggc agg aat act gca gcc aaa gtc aaa tat tct aag acg ccg 48
Ser Asp Gly Arg Asn Thr Ala Ala Lys Val Lys Tyr Ser Lys Thr Pro
1 5 10 15
gag gaa tgc tgt ccc aat cct ccc tgt ttc gcg aca aat tcg gat att 96
Glu Glu Cys Cys Pro Asn Pro Pro Cys Phe Ala Thr Asn Ser Asp Ile

20

25

30

tgt ggc gga aga cgc tcatgctcca ggaccctctg aaccacgacg t 142
 Cys Gly Gly Arg Arg
 35

<210> 328
 <211> 37
 <212> PRT
 <213> Conus lividus

<400> 328
 Ser Asp Gly Arg Asn Thr Ala Ala Lys Val Lys Tyr Ser Lys Thr Pro 142
 1 5 10 15
 Glu Glu Cys Cys Pro Asn Pro Pro Cys Phe Ala Thr Asn Ser Asp Ile 30
 20 25 30
 Cys Gly Gly Arg Arg
 35

<210> 329
 <211> 157
 <212> DNA
 <213> Conus lividus

<220>
 <221> CDS
 <222> (1)..(117)

<400> 329
 tct aat ggc agg aat gcc gca gcc aaa ttc aaa gcg cct gcc ctg atg 48
 Ser Asn Gly Arg Asn Ala Ala Ala Lys Phe Lys Ala Pro Ala Leu Met
 1 5 10 15
 aag cgg acc gtc agg gat gct tgc tgt tca gac cct cgc tgt tcc ggg 96
 Lys Arg Thr Val Arg Asp Ala Cys Cys Ser Asp Pro Arg Cys Ser Gly
 20 25 30
 aaa cat caa gac ctg tgt ggc tgaagacgct gatgctccag gaccctctga 147
 Lys His Gln Asp Leu Cys Gly
 35
 accacgacgt 157

<210> 330
 <211> 39
 <212> PRT
 <213> Conus lividus

<400> 330
 Ser Asn Gly Arg Asn Ala Ala Lys Phe Lys Ala Pro Ala Leu Met 142
 1 5 10 15
 Lys Arg Thr Val Arg Asp Ala Cys Cys Ser Asp Pro Arg Cys Ser Gly 30
 Lys His Gln Asp Leu Cys Gly
 35

<210> 331

<211> 157

<212> DNA

<213> Conus lividus

<220>

<221> CDS

<222> (1)..(117)

<400> 331

tct	aat	ggc	agg	aat	gcc	gca	gcc	aaa	ttc	aaa	gcg	cct	gcc	ctg	atg	48
Ser	Asn	Gly	Arg	Asn	Ala	Ala	Ala	Lys	Phe	Lys	Ala	Pro	Ala	Leu	Met	
1					5				10					15		

gag	ctg	acc	gtc	agg	gaa	gat	tgc	tgt	tca	gac	cct	cgc	tgt	tcc	gtg	96
Glu	Leu	Thr	Val	Arg	Glu	Asp	Cys	Cys	Ser	Asp	Pro	Arg	Cys	Ser	Val	
			20					25					30			

gga	cat	caa	gac	ctg	tgt	ggc	tgaagacgct	gatgctccag	gaccctctga	147
Gly	His	Gln	Asp	Leu	Cys	Gly				
		35								

accacgacgt

157

<210> 332

<211> 39

<212> PRNT

<213> Conus lividus

<400> 332

Ser	Asn	Gly	Arg	Asn	Ala	Ala	Ala	Lys	Phe	Lys	Ala	Pro	Ala	Leu	Met
1					5				10					15	

Glu	Leu	Thr	Val	Arg	Glu	Asp	Cys	Cys	Ser	Asp	Pro	Arg	Cys	Ser	Val
			20					25					30		

Gly	His	Gln	Asp	Leu	Cys	Gly									
		35													

<210> 333

<211> 157

<212> DNA

<213> Conus lividus

<220>

<221> CDS

<222> (1)..(126)

<400> 333

gca	ttt	gat	ggc	agg	aat	gct	gca	gcc	agc	gac	aaa	gcg	tcc	gag	ctg	48
Ala	Phe	Asp	Gly	Arg	Asn	Ala	Ala	Ala	Ser	Asp	Lys	Ala	Ser	Glu	Leu	
1						5				10				15		

atg	gct	ctg	gcc	gtc	agg	gga	tgc	tgt	tcc	cat	cct	gcc	tgt	gct	ggg	96
Met	Ala	Leu	Ala	Val	Arg	Gly	Cys	Cys	Ser	His	Pro	Ala	Cys	Ala	Gly	
			20					25					30			

agt	aat	gca	cat	atc	tgt	ggc	aga	aga	cgc	tatgctcca	ggaccctctg	146
Ser	Asn	Ala	His	Ile	Cys	Gly	Arg	Arg	Arg			
		35						40				

aaccacgacg t

157

<210> 334
<211> 42
<212> PRT
<213> Conus lividus

<400> 334
Ala Phe Asp Gly Arg Asn Ala Ala Ala Ser Asp Lys Ala Ser Glu Leu
1 5 10 15
Met Ala Leu Ala Val Arg Gly Cys Cys Ser His Pro Ala Cys Ala Gly
20 25 30
Ser Asn Ala His Ile Cys Gly Arg Arg Arg
35 40

<210> 335
<211> 157
<212> DNA
<213> Conus lividus

<220>
<221> CDS
<222> (1)..(117)

<400> 335
tct aat ggc agg aat gcc gca gaa ttc aaa gcg cct gcc ctg atg 48
Ser Asn Gly Arg Asn Ala Ala Ala Lys Phe Lys Ala Pro Ala Leu Met
1 5 10 15
aag ctg acc gtc agg gag gat tgc tgt tca gac cct cgc tgt tcc gtg 96
Lys Leu Thr Val Arg Glu Asp Cys Cys Ser Asp Pro Arg Cys Ser Val
20 25 30
gga cat caa gac atg tgt ggc tgaagacgct gatgctccag gaccctctga 147
Gly His Gln Asp Met Cys Gly
35
atcacgacgt 157

<210> 336
<211> 39
<212> PRT
<213> Conus lividus

<400> 336
Ser Asn Gly Arg Asn Ala Ala Ala Lys Phe Lys Ala Pro Ala Leu Met
1 5 10 15
Lys Leu Thr Val Arg Glu Asp Cys Cys Ser Asp Pro Arg Cys Ser Val
20 25 30
Gly His Gln Asp Met Cys Gly
35

<210> 337
<211> 154
<212> DNA
<213> Conus lividus

<220>

<221> CDS
<222> (1)..(114)

<400> 337
ttt gaa tgc agg aat gct gca ggc aac gac aaa gcg act gac ctg atg 48
Phe Glu Cys Arg Asn Ala Ala Gly Asn Asp Lys Ala Thr Asp Leu Met
1 5 10 15

gct ctg act gtc agg gga tgc tgt tcc cat cct gcc tgt gct ggg aat 96
Ala Leu Thr Val Arg Gly Cys Cys Ser His Pro Ala Cys Ala Gly Asn
20 25 30

aat cca cat atc tgc ggc tgaagacgct gatgctccag gaccctctga 144
Asn Pro His Ile Cys Gly
35

accacgacgt 154

<210> 338
<211> 38
<212> PRT
<213> Conus lividus

<400> 338
Phe Glu Cys Arg Asn Ala Ala Gly Asn Asp Lys Ala Thr Asp Leu Met 48
1 5 10 15

Ala Leu Thr Val Arg Gly Cys Cys Ser His Pro Ala Cys Ala Gly Asn
20 25 30

Asn Pro His Ile Cys Gly
35

<210> 339
<211> 154
<212> DNA
<213> Conus lividus

<220>
<221> CDS
<222> (1)..(114)

<400> 339
ttt gat ggc agg aac gcc gca ggc aac aac aaa gcg act gat ctg atg 48
Phe Asp Gly Arg Asn Ala Ala Asn Asn Lys Ala Thr Asp Leu Met
1 5 10 15

gct ctg act gtc aga gga tgc tgt ggc aat cct tca tgt agc atc cat 96
Ala Leu Thr Val Arg Gly Cys Cys Gly Asn Pro Ser Cys Ser Ile His
20 25 30

att cct tac gtt tgt aat tagagacact gatgctccag gaccctctga 144
Ile Pro Tyr Val Cys Asn
35

accacgacgt 154

<210> 340
<211> 38
<212> PRT
<213> Conus lividus

<400> 340
 Phe Asp Gly Arg Asn Ala Ala Ala Asn Asn Lys Ala Thr Asp Leu Met
 1 5 10 15
 Ala Leu Thr Val Arg Gly Cys Cys Gly Asn Pro Ser Cys Ser Ile His
 20 25 30
 Ile Pro Tyr Val Cys Asn
 35

<210> 341
<211> 157
<212> DNA
<213> Conus lividus

<220>
<221> CDS
<222> (1)...(126)

<400> 341
tct aat ggc agg aat gcc gca gcc aaa ttc aaa gcg cct gcc ctg atg 48
Ser Asn Gly Arg Asn Ala Ala Ala Lys Phe Lys Ala Pro Ala Leu Met
 1 5 10 15
aag cgg acc gac agc gaa gaa tgc tgt tta gac tct cgc tgt gcc ggg 96
Lys Arg Thr Asp Ser Glu Glu Cys Cys Leu Asp Ser Arg Cys Ala Gly
 20 25 30
caa cat caa gac ctg tgt ggc gga aga cgc tcatgtccca ggaccctctg 146
Gln His Gln Asp Leu Cys Gly Gly Arg Arg
 35 40
aaccacgacg t 157

<210> 342
<211> 42
<212> PRT
<213> Conus lividus

<400> 342
Ser Asn Gly Arg Asn Ala Ala Ala Lys Phe Lys Ala Pro Ala Leu Met
 1 5 10 15
Lys Arg Thr Asp Ser Glu Glu Cys Cys Leu Asp Ser Arg Cys Ala Gly
 20 25 30
Gln His Gln Asp Leu Cys Gly Gly Arg Arg
 35 40

<210> 343
<211> 126
<212> DNA
<213> Conus marmoreus

<220>
<221> CDS
<222> (1)...(123)

<400> 343
tct gat ggc agg aat gcc gca gcc aag gac aaa gcg tct gac ctg gtc 48
Ser Asp Gly Arg Asn Ala Ala Lys Asp Lys Ala Ser Asp Leu Val

1	5	10	15
---	---	----	----

gct ctg acc gtc aag gga tgc tgt tct aat cct ccc tgt tac gcg aat 96
 Ala Leu Thr Val Lys Gly Cys Cys Ser Asn Pro Pro Cys Tyr Ala Asn
 20 25 30

aat caa gcc tat tgt aat gga aga cgc tga 126
 Asn Gln Ala Tyr Cys Asn Gly Arg Arg
 35 40

<210> 344

<211> 41

<212> PRT

<213> Conus marmoreus

<400> 344

Ser	Asp	Gly	Arg	Asn	Ala	Ala	Lys	Asp	Lys	Ala	Ser	Asp	Leu	Val
1														

Ala Leu Thr Val Lys Gly Cys Cys Ser Asn Pro Pro Cys Tyr Ala Asn
 20 25 30

Asn Gln Ala Tyr Cys Asn Gly Arg Arg
 35 40

<210> 345

<211> 117

<212> DNA

<213> Conus marmoreus

<220>

<221> CDS

<222> (1)..(114)

<400> 345

tct	gat	ggc	agg	aat	gcc	gca	gcc	aag	gac	aaa	gcg	tct	gac	ctg	gtc
Ser	Asp	Gly	Arg	Asn	Ala	Ala	Ala	Lys	Asp	Lys	Ala	Ser	Asp	Leu	Val
1															

48

gct ctg acc gtc aag gga tgc tgt tct cat cct gcc tgt agc gtg aat 96
 Ala Leu Thr Val Lys Gly Cys Cys Ser His Pro Ala Cys Ser Val Asn
 20 25 30

aat cca gac att tgt ggt tga 117
 Asn Pro Asp Ile Cys Gly
 35

<210> 346

<211> 38

<212> PRT

<213> Conus marmoreus

<400> 346

Ser	Asp	Gly	Arg	Asn	Ala	Ala	Lys	Asp	Lys	Ala	Ser	Asp	Leu	Val
1														

48

Ala Leu Thr Val Lys Gly Cys Cys Ser His Pro Ala Cys Ser Val Asn
 20 25 30

Asn Pro Asp Ile Cys Gly
 35

<210> 347
 <211> 145
 <212> DNA
 <213> Conus musicus

<220>
 <221> CDS
 <222> (1)..(114)

<400> 347

tct	gat	ggc	agg	aat	gct	gca	gcc	aac	aac	aaa	gtg	gct	ttg	acc	atg		48
Ser	Asp	Gly	Arg	Asn	Ala	Ala	Asn	Asn	Lys	Val	Ala	Leu	Thr	Met			
1		5				10							15				

agg gga aaa tgc tgt atc aat gat gcg tgt cgc tcg aaa cat cca cag
 Arg Gly Lys Cys Cys Ile Asn Asp Ala Cys Arg Ser Lys His Pro Gln
 20 25 30

tac tgt tct gga aga cgc tgatactcca ggaccctctg aaccacgacg t
 Tyr Cys Ser Gly Arg Arg
 35

<210> 348
 <211> 38
 <212> PRT
 <213> Conus musicus

<400> 348

Ser	Asp	Gly	Arg	Asn	Ala	Ala	Asn	Asn	Lys	Val	Ala	Leu	Thr	Met		48
1		5				10							15			

Arg Gly Lys Cys Cys Ile Asn Asp Ala Cys Arg Ser Lys His Pro Gln
 20 25 30

Tyr Cys Ser Gly Arg Arg
 35

<210> 349
 <211> 154
 <212> DNA
 <213> Conus musicus

<220>
 <221> CDS
 <222> (1)..(123)

<400> 349

tct	gat	ggc	agg	aat	gct	gca	gcc	aac	gac	aaa	gtg	tct	gac	cag	atg		48
Ser	Asp	Gly	Arg	Asn	Ala	Ala	Asn	Asp	Lys	Val	Ser	Asp	Gln	Met			
1		5				10							15				

gct ctg gtt gtc agg gga tgc tgt tac aat att gcc tgt aga att aat
 Ala Leu Val Val Arg Gly Cys Cys Tyr Asn Ile Ala Cys Arg Ile Asn
 20 25 30

aat cca cgg tac tgt cgt gga aaa cgc tgatgttcca ggaccctctg
 Asn Pro Arg Tyr Cys Arg Gly Lys Arg
 35 40

aaccacgacg t

154

<210> 350

<211> 41

<212> PRT

<213> Conus musicus

<400> 350

Ser	Asp	Gly	Arg	Asn	Ala	Ala	Ala	Asn	Asp	Lys	Val	Ser	Asp	Gln	Met
1				5				10					15		

Ala	Leu	Val	Val	Arg	Gly	Cys	Cys	Tyr	Asn	Ile	Ala	Cys	Arg	Ile	Asn
				20				25				30			

Asn	Pro	Arg	Tyr	Cys	Arg	Gly	Lys	Arg
			35			40		

<210> 351

<211> 154

<212> DNA

<213> Conus obscurus

<220>

<221> CDS

<222> (52)..(123)

<400> 351

tctgaaggca	ggaatgccgc	agccaaacgac	aaagcgtctg	acctgatggc	t	ctg	aac	57
						Leu	Asn	
						1		

gtc	agg	gga	tgc	tgt	tcc	cat	cct	gtc	tgt	cgc	ttc	aat	tat	cca	aaa	105
Val	Arg	Gly	Cys	Cys	Ser	His	Pro	Val	Cys	Arg	Phe	Asn	Tyr	Pro	Lys	
			5				10					15				

tat	tgt	ggt	gga	aga	cgc	tgatggtcca	ggaccctctg	aaccacgacg	t	154
Tyr	Cys	Gly	Gly	Arg	Arg					
	20									

<210> 352

<211> 24

<212> PRT

<213> Conus obscurus

<400> 352

Leu	Asn	Val	Arg	Gly	Cys	Cys	Ser	His	Pro	Val	Cys	Arg	Phe	Asn	Tyr
1				5				10				15			

Pro	Lys	Tyr	Cys	Gly	Gly	Arg	Arg
			20				

<210> 353

<211> 151

<212> DNA

<213> Conus obscurus

<220>

<221> CDS

<222> (46)..(111)

<400> 353

tctgatggcg	ggaatgccgc	agcaaaagcg	tttgatctaa	tcact	ctg	gcc	ctc	agg	57
						Leu	Ala	Leu	Arg

1

gat gaa tgc tgt gcc agt cct ccc tgt cgt ttg aat aat cca tac gta 105
 Asp Glu Cys Cys Ala Ser Pro Pro Cys Arg Leu Asn Asn Pro Tyr Val
 5 10 15 20

tgt cat tgacgacgct gatgctccag gaccctctga accacgacgt 151
 Cys His

<210> 354
<211> 22
<212> PRT
<213> Conus obscurus

<400> 354
Leu Ala Leu Arg Asp Glu Cys Cys Ala Ser Pro Pro Cys Arg Leu Asn 15
 1 5 10 15
Asn Pro Tyr Val Cys His
 20

<210> 355
<211> 217
<212> DNA
<213> Conus obscurus

<220>
<221> CDS
<222> (1)..(186)

<400> 355
atg ttc acc gtg ttt ctg ttg gtt gtc ttg gca acc acc gtc gtt tcc 48
Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser
 1 5 10 15

ccc act tca gat cgt gca tct gat agg agg aat gcc gca gcc aaa gcg 96
Pro Thr Ser Asp Arg Ala Ser Asp Arg Arg Asn Ala Ala Ala Lys Ala
 20 25 30

ttt gac ctg aga tat tcg acc gcc aag aga gga tgc tgt tcc aat cct 144
Phe Asp Leu Arg Tyr Ser Thr Ala Lys Arg Gly Cys Cys Ser Asn Pro
 35 40 45

gtc tgt tgg cag aat aat gca gaa tac tgt cgt gaa aat ggc 186
Val Cys Trp Gln Asn Asn Ala Glu Tyr Cys Arg Glu Ser Gly
 50 55 60

taatgctcca ggaccctctg aaccacgacg t 217

<210> 356
<211> 62
<212> PRT
<213> Conus obscurus

<400> 356
Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser 15
 1 5 10 15
Pro Thr Ser Asp Arg Ala Ser Asp Arg Arg Asn Ala Ala Ala Lys Ala
 20 25 30

Phe Asp Leu Arg Tyr Ser Thr Ala Lys Arg Gly Cys Cys Ser Asn Pro
 35 40 45

Val Cys Trp Gln Asn Asn Ala Glu Tyr Cys Arg Glu Ser Gly
 50 55 60

<210> 357

<211> 208

<212> DNA

<213> Conus obscurus

<220>

<221> CDS

<222> (1)..(168)

<400> 357

atg ttc acc gtg ttt ctg ttg gtt gtc ttg gca acc acc gtc gtt tcc	48
Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser	
1 5 10 15	

ttc act tca gat cgt gca tct gat ggc ggg aat gtc gca gcg tct cac	96
Phe Thr Ser Asp Arg Ala Ser Asp Gly Gly Asn Val Ala Ala Ser His	
20 25 30	

ctg atc gct ctg acc atc aag gga tgc tgt tct cac cct ccc tgt gcc	144
Leu Ile Ala Leu Thr Ile Lys Gly Cys Cys Ser His Pro Pro Cys Ala	
35 40 45	

cag aat aat caa gac tat tgt ggt tgacgacgct gatgctccag gaccctctga	198
Gln Asn Asn Gln Asp Tyr Cys Gly	
50 55	

accacgacgt 208

<210> 358

<211> 56

<212> PRT

<213> Conus obscurus

<400> 358

Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser	
1 5 10 15	

Phe Thr Ser Asp Arg Ala Ser Asp Gly Gly Asn Val Ala Ala Ser His	
20 25 30	

Leu Ile Ala Leu Thr Ile Lys Gly Cys Cys Ser His Pro Pro Cys Ala	
35 40 45	

Gln Asn Asn Gln Asp Tyr Cys Gly	
50 55	

<210> 359

<211> 217

<212> DNA

<213> Conus obscurus

<220>

<221> CDS

<222> (1)..(186)

<400> 359
atg ttc acc gtg ttt ctg ttg gtt gtc tta tca acc acc gtc gtt tcc 48
Met Phe Thr Val Phe Leu Leu Val Val Leu Ser Thr Thr Val Val Ser
1 5 10 15

tcc act tca gat cgt gca tct gat agg agg aat gcc gca gcc aaa gcg 96
Ser Thr Ser Asp Arg Ala Ser Asp Arg Arg Asn Ala Ala Lys Ala
20 25 30

tct gac ctg atg tat tcg acc gtc aag aaa gga tgt tgt tcc cat cct 144
Ser Asp Leu Met Tyr Ser Thr Val Lys Lys Gly Cys Cys Ser His Pro
35 40 45

gcc tgt tcg ggg aat aat cga gaa tat tgt cgt gaa aat ggc 186
Ala Cys Ser Gly Asn Asn Arg Glu Tyr Cys Arg Glu Ser Gly
50 55 60

taatgctcca ggaccctctg aaccacgacg t 217

<210> 360
<211> 62
<212> PRT
<213> Conus obscurus

<400> 360
Met Phe Thr Val Phe Leu Leu Val Val Leu Ser Thr Thr Val Val Ser
1 5 10 15

Ser Thr Ser Asp Arg Ala Ser Asp Arg Arg Asn Ala Ala Lys Ala
20 25 30

Ser Asp Leu Met Tyr Ser Thr Val Lys Lys Gly Cys Cys Ser His Pro
35 40 45

Ala Cys Ser Gly Asn Asn Arg Glu Tyr Cys Arg Glu Ser Gly
50 55 60

<210> 361
<211> 157
<212> DNA
<213> Conus omaria

<220>
<221> CDS
<222> (52)..(126)

<400> 361
tttgatggca ggaatgcctc agccgacacgc aaagtggctg cccggatcgc t cag atc 57
Gln Ile
1

gac agg gat cca tgc tgt tcc tat cct gac tgt ggc gcg aat cat cca 105
Asp Arg Asp Pro Cys Cys Ser Tyr Pro Asp Cys Gly Ala Asn His Pro
5 10 15

gag att tgt ggt gga aaa cgc tgatgctcca ggaccctctg aaccacgacg t 157
Glu Ile Cys Gly Gly Lys Arg
20 25

<210> 362
<211> 25

<212> PRT
<213> Conus omaria

<400> 362
Gln Ile Asp Arg Asp Pro Cys Cys Ser Tyr Pro Asp Cys Gly Ala Asn
1 5 10 15
His Pro Glu Ile Cys Gly Gly Lys Arg
20 25

<210> 363
<211> 128
<212> DNA
<213> Conus omaria

<220>
<221> CDS
<222> (26)..(88)

<400> 363
tctcatggca ggaatgccgc acgct ctg acc gtc agg gaa tgc tgt tct cag 52
Leu Thr Val Arg Glu Cys Cys Ser Gln
1 5
cct cct tgt cgc tgg aaa cat cca gaa ctt tgt agt tgaagacgct 98
Pro Pro Cys Arg Trp Lys His Pro Glu Leu Cys Ser
10 15 20
gatgctccag gaccctctga accacgacgt 128

<210> 364
<211> 21
<212> PRT
<213> Conus omaria

<400> 364
Leu Thr Val Arg Glu Cys Cys Ser Gln Pro Pro Cys Arg Trp Lys His
1 5 10 15
Pro Glu Leu Cys Ser
20

<210> 365
<211> 154
<212> DNA
<213> Conus omaria

<220>
<221> CDS
<222> (52)..(123)

<400> 365
tttgatggca ggaatgctgc agccagcgac aaagcgtctg agctgatggc t ctg gcc 57
Leu Ala
1
gtc agg gga tgc tgt tcc cat cct gcc tgt gct ggg aat aat cca cat 105
Val Arg Gly Cys Cys Ser His Pro Ala Cys Ala Gly Asn Asn Pro His
5 10 15
atc tgt ggc aga aga cgc tgatgctcca ggaccctctg aaccacgacg t 154

Ile Cys Gly Arg Arg Arg
20

<210> 366
<211> 24
<212> PRT
<213> Conus omaria

<400> 366
Leu Ala Val Arg Gly Cys Cys Ser His Pro Ala Cys Ala Gly Asn Asn
1 5 10 15

Pro His Ile Cys Gly Arg Arg Arg
20

<210> 367
<211> 142
<212> DNA
<213> Conus omaria

<220>
<221> CDS
<222> (40)..(102)

<400> 367
tctggtgtca ggaaagacgc agcgctggc ctgatcgct ctg acc atc aag gga 54
Leu Thr Ile Lys Gly
1 5

tgc tgt tct gat cct agc tgt aac gtg aat aat cca gac tat tgt ggt 102
Cys Cys Ser Asp Pro Ser Cys Asn Val Asn Asn Pro Asp Tyr Cys Gly
10 15 20

tgacgacgct gatgctccag gaccctctga accacgacgt 142

<210> 368
<211> 21
<212> PRT
<213> Conus omaria

<400> 368
Leu Thr Ile Lys Gly Cys Cys Ser Asp Pro Ser Cys Asn Val Asn Asn
1 5 10 15

Pro Asp Tyr Cys Gly
20

<210> 369
<211> 157
<212> DNA
<213> Conus omaria

<220>
<221> CDS
<222> (52)..(117)

<400> 369
tctaattggca ggaatgccgc agccaaattc aaagcgctg ccctgatgga g ctg acc 57
Leu Thr
1

gtc agg gaa gaa tgc tgt tca gac cct cgc tgt tcc gtg gga cat caa 105
 Val Arg Glu Glu Cys Cys Ser Asp Pro Arg Cys Ser Val Gly His Gln
 5 10 15

gat atg tgt cggtgaagcacgt gatgctccag gaccctctga accacgacgt 157
 Asp Met Cys Arg
 20

<210> 370
<211> 22
<212> PRT
<213> Conus omaria

<400> 370
Leu Thr Val Arg Glu Glu Cys Cys Ser Asp Pro Arg Cys Ser Val Gly 15
 1 5 10 15
His Gln Asp Met Cys Arg
 20

<210> 371
<211> 151
<212> DNA
<213> Conus purpurascens

<220>
<221> CDS
<222> (1)..(120)

<400> 371
act gat ggc agg aat gct gca gcc ata gcg ctt gac ctg atc gct ccg 48
Thr Asp Gly Arg Asn Ala Ala Ala Ile Ala Leu Asp Leu Ile Ala Pro
 1 5 10 15

gcc gtc agg gga gga tgc tgt tcc aat cct gcc tgt tta gtg aat cat 96
Ala Val Arg Gly Gly Cys Cys Ser Asn Pro Ala Cys Leu Val Asn His
 20 25 30

cta gaa atg tgt ggt aaa aga cgc tgatccccca ggaccctctg aaccacgacg 150
Leu Glu Met Cys Gly Lys Arg Arg
 35 40

t 151

<210> 372
<211> 40
<212> PRT
<213> Conus purpurascens

<400> 372
Thr Asp Gly Arg Asn Ala Ala Ala Ile Ala Leu Asp Leu Ile Ala Pro 15
 1 5 10 15

Ala Val Arg Gly Gly Cys Cys Ser Asn Pro Ala Cys Leu Val Asn His
 20 25 30

Leu Glu Met Cys Gly Lys Arg Arg
 35 40

<210> 373

<211> 160
 <212> DNA
 <213> Conus purpurascens

<220>
 <221> CDS
 <222> (1)...(120)

<400> 373
 tct gat ggc agg gat gcc gca gcc aac gac aaa gcg tct gac ctg atc 48
 Ser Asp Gly Arg Asp Ala Ala Ala Asn Asp Lys Ala Ser Asp Leu Ile
 1 5 10 15

gct ctg acc gcc agg aga gat cca tgc tgt ttc aat cct gcc tgt aac 96
 Ala Leu Thr Ala Arg Arg Asp Pro Cys Cys Phe Asn Pro Ala Cys Asn
 20 25 30

gtg aat aat cca cag att tgt ggt tgaagacgct gatgctccag gaccctctga 150
 Val Asn Asn Pro Gln Ile Cys Gly
 35 40

accacgacgt 160

<210> 374
 <211> 40
 <212> PRT
 <213> Conus purpurascens

<400> 374
 Ser Asp Gly Arg Asp Ala Ala Ala Asn Asp Lys Ala Ser Asp Leu Ile 15
 1 5 10 15

Ala Leu Thr Ala Arg Arg Asp Pro Cys Cys Phe Asn Pro Ala Cys Asn
 20 25 30

Val Asn Asn Pro Gln Ile Cys Gly
 35 40

<210> 375
 <211> 151
 <212> DNA
 <213> Conus purpurascens

<220>
 <221> CDS
 <222> (1)...(120)

<400> 375
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 Ser Asp Gly Arg Asp Ala Glu Lys Thr Gly Phe Asp Thr Thr Ile Val
 1 5 10 15

ccg gaa gac tgc tgt tcg gat cct tcc tgt tgg agg ctg cat agt tta 96
 Pro Glu Asp Cys Cys Ser Asp Pro Ser Cys Trp Arg Leu His Ser Leu
 20 25 30

gct tgt act gga att gta aac cgc tgatgctcca ggaccctctg aaccacgacg 150
 Ala Cys Thr Gly Ile Val Asn Arg
 35 40

<210> 376

<211> 40

<212> PRT

<213> Conus purpurascens

<400> 376

Ser	Asp	Gly	Arg	Asp	Ala	Glu	Lys	Thr	Gly	Phe	Asp	Thr	Thr	Ile	Val
1					5				10					15	

Pro	Glu	Asp	Cys	Cys	Ser	Asp	Pro	Ser	Cys	Trp	Arg	Leu	His	Ser	Leu
						20		25					30		

Ala	Cys	Thr	Gly	Ile	Val	Asn	Arg
		35				40	

<210> 377

<211> 142

<212> DNA

<213> Conus purpurascens

<220>

<221> CDS

<222> (1)..(111)

<400> 377

act	gat	ggc	agg	agt	gct	gca	gcc	ata	gcg	ttt	gcc	ctg	atc	gct	ccg	48
Thr	Asp	Gly	Arg	Ser	Ala	Ala	Ala	Ile	Ala	Phe	Ala	Leu	Ile	Ala	Pro	
1					5				10				15			

acc	gtc	tgc	tgt	act	aat	cct	gcc	tgt	ctc	gtg	aat	aat	ata	cgc	ttt	96
Thr	Val	Cys	Cys	Thr	Asn	Pro	Ala	Cys	Leu	Val	Asn	Asn	Ile	Arg	Phe	
					20			25			30					

tgt	ggg	gga	aga	cgc	tgtatgccccca	ggaccctctg	aaccacgacg	t	142
Cys	Gly	Gly	Arg	Arg					
	35								

<210> 378

<211> 37

<212> PRT

<213> Conus purpurascens

<400> 378

Thr	Asp	Gly	Arg	Ser	Ala	Ala	Ala	Ile	Ala	Phe	Ala	Leu	Ile	Ala	Pro
1					5				10			15			

Thr	Val	Cys	Cys	Thr	Asn	Pro	Ala	Cys	Leu	Val	Asn	Asn	Ile	Arg	Phe
					20			25			30				

Cys	Gly	Gly	Arg	Arg
	35			

<210> 379

<211> 157

<212> DNA

<213> Conus regius

<220>

<221> CDS

<222> (1)..(117)

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<400> 379
tct gat gga aga aat gcc gca agc gac gcc aaa gcg ttt ccc cgg atc      48
Ser Asp Gly Arg Asn Ala Ala Ser Asp Ala Lys Ala Phe Pro Arg Ile
   1           5           10          15

gct cca atc gtc agg gac gaa tgc tgt agc gat cct agg tgt cac ggg      96
Ala Pro Ile Val Arg Asp Glu Cys Cys Ser Asp Pro Arg Cys His Gly
   20          25          30

aat aat cgg gac cac tgt gct tgaagacgct gctgctccag gaccctctga      147
Asn Asn Arg Asp His Cys Ala
   35

accacgacgt          •          157

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<210> 381
<211> 156
<212> DNA
<213> Conus regius

<220>
<221> CDS
<222> (1)..(117)

<400> 381
tct gat ggc agg aat acc gcg gcc gac gaa aaa gcg tcc gac ctg atc 48
Ser Asp Gly Arg Asn Thr Ala Ala Asp Glu Lys Ala Ser Asp Leu Ile
   1           5               10             15

tct caa act gtc aag aga gat tgc tgt tcc cat cct ctc tgt aga tta 96
Ser Gln Thr Val Lys Arg Asp Cys Cys Ser His Pro Leu Cys Arg Leu
   20          25             30

ttt gtt cca gga ctt tgt att tgaagacgct gctgctccag gaccctctga 147
Phe Val Pro Gly Leu Cys Ile
   35

accacqact

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<210> 382
<211> 39
<212> PRT
<213> Conus regius

<400> 382
Ser Asp Gly Arg Asn Thr Ala Ala Asp Glu Lys Ala Ser Asp Leu Ile

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5

10

15

Ser Gln Thr Val Lys Arg Asp Cys Cys Ser His Pro Leu Cys Arg Leu
 20 25 30

Phe Val Pro Gly Leu Cys Ile
 35

<210> 383
 <211> 157
 <212> DNA
 <213> Conus regius

<220>
 <221> CDS
 <222> (1)..(117)

<400> 383 48
 tct gat ggc agg aat gcc gca gcc gac aac aaa gcg tct gac cta atc
 Ser Asp Gly Arg Asn Ala Ala Ala Asp Asn Lys Ala Ser Asp Leu Ile
 1 5 10 15

gct caa atc gtc agg aga gga tgc tgt tcc cat cct gtc tgt aaa gtg 96
 Ala Gln Ile Val Arg Arg Gly Cys Cys Ser His Pro Val Cys Lys Val
 20 25 30

agg tat cca gac ctg tgt cgt tgaagacgct gctgctccag gaccctctga 147
 Arg Tyr Pro Asp Leu Cys Arg
 35

accacgacgt 157

<210> 384
 <211> 39
 <212> PRT
 <213> Conus regius

<400> 384
 Ser Asp Gly Arg Asn Ala Ala Ala Asp Asn Lys Ala Ser Asp Leu Ile
 1 5 10 15

Ala Gln Ile Val Arg Arg Gly Cys Cys Ser His Pro Val Cys Lys Val
 20 25 30

Arg Tyr Pro Asp Leu Cys Arg
 35

<210> 385
 <211> 157
 <212> DNA
 <213> Conus regius

<220>
 <221> CDS
 <222> (1)..(117)

<400> 385 48
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 Ser Asp Gly Arg Asn Ala Ala Ala Asp Asn Arg Ala Ser Asp Leu Ile
 1 5 10 15

134

gct caa atc gtc agg aga gga tgc tgt tcc cat cct gcc tgt aat gtg 96
Ala Gln Ile Val Arg Arg Gly Cys Cys Ser His Pro Ala Cys Asn Val
20 25 30

aat aat cca cac att tgt ggt tgaagacgct gctgctccag gaccctctga 147
Asn Asn Pro His Ile Cys Gly
35

accacgacgt 157

<210> 386
<211> 39
<212> PRT
<213> Conus regius

<400> 386
Ser Asp Gly Arg Asn Ala Ala Ala Asp Asn Arg Ala Ser Asp Leu Ile
1 5 10 15

Ala Gln Ile Val Arg Arg Gly Cys Cys Ser His Pro Ala Cys Asn Val
20 25 30

Asn Asn Pro His Ile Cys Gly
35

<210> 387
<211> 157
<212> DNA
<213> Conus regius

<220>
<221> CDS
<222> (1)..(117)

<400> 387
tct gat ggc agg aat gcc gca gcc gac aac aaa ccg tct gac cta atc 48
Ser Asp Gly Arg Asn Ala Ala Ala Asp Asn Lys Pro Ser Asp Leu Ile
1 5 10 15

gct caa atc gtc agg aga gga tgc tgt tcg cat cct gtc tgt aaa gtg 96
Ala Gln Ile Val Arg Arg Gly Cys Cys Ser His Pro Val Cys Lys Val
20 25 30

agg tat tca gac atg tgt ggt tgaagacgct gctgctccag gaccctctga 147
Arg Tyr Ser Asp Met Cys Gly
35

accacgacgt 157

<210> 388
<211> 39
<212> PRT
<213> Conus regius

<400> 388
Ser Asp Gly Arg Asn Ala Ala Ala Asp Asn Lys Pro Ser Asp Leu Ile
1 5 10 15

Ala Gln Ile Val Arg Arg Gly Cys Cys Ser His Pro Val Cys Lys Val
20 25 30

Arg Tyr Ser Asp Met Cys Gly
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<210> 389
<211> 154
<212> DNA
<213> Conus stercusmuscarum

<220>
<221> CDS
<222> (1)..(114)

<400> 389
tct gat ggc agg aat gca gag cga cga caa agc gtc tgt cct ggt cgcc 48
Ser Asp Gly Arg Asn Ala Glu Arg Arg Gln Ser Val Cys Pro Gly Arg
1 5 10 15

tct ggc ccc agg gga gga tgt tgt tcc cac cct gcc tgt aag gtg cat 96
Ser Gly Pro Arg Gly Gly Cys Cys Ser His Pro Ala Cys Lys Val His
20 25 30

ttt cca cac agt tgt ggt tgacgacgct gatgctccag gaccctctga 144
Phe Pro His Ser Cys Gly
35

accacgacgt 154

<210> 390
<211> 38
<212> PRT
<213> Conus stercusmuscarum

<400> 390
Ser Asp Gly Arg Asn Ala Glu Arg Arg Gln Ser Val Cys Pro Gly Arg
1 5 10 15

Ser Gly Pro Arg Gly Gly Cys Cys Ser His Pro Ala Cys Lys Val His
20 25 30

Phe Pro His Ser Cys Gly
35

<210> 391
<211> 145
<212> DNA
<213> Conus stercusmuscarum

<220>
<221> CDS
<222> (1)..(114)

<400> 391
tct gat ggc agg aat gcc gca gcc agc gad aga gcg tct gac gcg gcc 48
Ser Asp Gly Arg Asn Ala Ala Ala Ser Asp Arg Ala Ser Asp Ala Ala
1 5 10 15

cac cag gta tgc tgt tcc aac cct gtc tgt cac gtg gat cat cca gaa 96
His Gln Val Cys Cys Ser Asn Pro Val Cys His Val Asp His Pro Glu
20 25 30

ctt tgt cgt aga aga cgc tgatgctcca ggaccctctg aaccacgacgt t 145

Leu Cys Arg Arg Arg Arg
35

<210> 392
<211> 38
<212> PRT
<213> Conus stercusmuscarum

<400> 392
Ser Asp Gly Arg Asn Ala Ala Ala Ser Asp Arg Ala Ser Asp Ala Ala
1 5 10 15

His Gln Val Cys Cys Ser Asn Pro Val Cys His Val Asp His Pro Glu
20 25 30

Leu Cys Arg Arg Arg Arg
35

<210> 393
<211> 154
<212> DNA
<213> Conus striatus

<220>
<221> CDS
<222> (1)...(123)

<400> 393
tct gat ggc agg aat gcc gcg gcc aac gac aaa gcg tct gac ctg gtc 48
Ser Asp Gly Arg Asn Ala Ala Asn Asp Lys Ala Ser Asp Leu Val
1 5 10 15

gct ccg gcc atc agg gga tgc tgt tcc cac cct gtc tgt aac ttg agt 96
Ala Pro Ala Ile Arg Gly Cys Cys Ser His Pro Val Cys Asn Leu Ser
20 25 30

aat cca caa att tgt cgt gga aga cgc tgatgctcca ggaccctctg 143
Asn Pro Gln Ile Cys Arg Gly Arg Arg
35 40

aaccacgacg t 154

<210> 394
<211> 41
<212> PRT
<213> Conus striatus

<400> 394
Ser Asp Gly Arg Asn Ala Ala Ala Asn Asp Lys Ala Ser Asp Leu Val
1 5 10 15

Ala Pro Ala Ile Arg Gly Cys Cys Ser His Pro Val Cys Asn Leu Ser
20 25 30

Asn Pro Gln Ile Cys Arg Gly Arg Arg
35 40

<210> 395
<211> 117
<212> DNA

cont.

137

<213> Conus textile

<220>

<221> CDS

<222> (1)...(114)

<400> 395

ttt cat ggc agg aat gcc gca gcc aaa gcg tct ggc ctg gtc ggt ctg 48
Phe His Gly Arg Asn Ala Ala Ala Lys Ala Ser Gly Leu Val Gly Leu
1 5 10 15

acc gac aag agg caa gaa tgc tgt tct cat cct gcc tgt aac gta gat 96
Thr Asp Lys Arg Gln Glu Cys Cys Ser His Pro Ala Cys Asn Val Asp
20 25 30

cat cca gaa att tgt cgt tga
His Pro Glu Ile Cys Arg
35

117

<210> 396

<211> 38

<212> PRT

<213> Conus textile

<400> 396

Phe His Gly Arg Asn Ala Ala Ala Lys Ala Ser Gly Leu Val Gly Leu
1 5 10 15

Thr Asp Lys Arg Gln Glu Cys Cys Ser His Pro Ala Cys Asn Val Asp
20 25 30

His Pro Glu Ile Cys Arg
35

117

<210> 397

<211> 151

<212> DNA

<213> Conus tulipa

<220>

<221> CDS

<222> (1)...(120)

<400> 397

act gat ggc agg agt gct gca gcc ata gcg ttt gcc ctg atc gct ccg 48
Thr Asp Gly Arg Ser Ala Ala Ala Ile Ala Phe Ala Leu Ile Ala Pro
1 5 10 15

acc gtc tgg gaa gga tgc tgt tct aat cct gcc tgt ctc gtg aat cat 96
Thr Val Trp Glu Gly Cys Cys Ser Asn Pro Ala Cys Leu Val Asn His
20 25 30

ata cgc ttt tgt ggt gga aga cgc tgatgccccca ggaccctctg aaccacgacg 150
Ile Arg Phe Cys Gly Gly Arg Arg
35 40

150

t

151

<210> 398

<211> 40

<212> PRT

138

<213> Conus tulipa

<400> 398
Thr Asp Gly Arg Ser Ala Ala Ala Ile Ala Phe Ala Leu Ile Ala Pro
1 5 10 15
Thr Val Trp Glu Gly Cys Cys Ser Asn Pro Ala Cys Leu Val Asn His
20 25 30
Ile Arg Phe Cys Gly Gly Arg Arg
35 40

<210> 399

<211> 157

<212> DNA

<213> Conus virgo

<220>
<221> CDS
<222> (1)..(117)

<400> 399
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Ser Asn Gly Met Asn Ala Ala Ile Arg Lys Ala Ser Ala Leu Val
1 5 10 15
gct cag atc gcc cat cga gac tgc tgt gac gat cct gcc tgc acc gtg 96
Ala Gln Ile Ala His Arg Asp Cys Cys Asp Asp Pro Ala Cys Thr Val
20 25 30
aat aat cca ggc ctt tgc act tgaagatgct gctgccccag gaccctctga 147
Asn Asn Pro Gly Leu Cys Thr
35
accacgacgt 157

<210> 400
<211> 39
<212> PRT
<213> Conus virgo

<400> 400
Ser Asn Gly Met Asn Ala Ala Ala Ile Arg Lys Ala Ser Ala Leu Val
1 5 10 15
Ala Gln Ile Ala His Arg Asp Cys Cys Asp Asp Pro Ala Cys Thr Val
20 25 30
Asn Asn Pro Gly Leu Cys Thr
35

<210> 401
<211> 154
<212> DNA
<213> Conus geographus

<220>
<221> CDS
<222> (1)..(114)

<400> 401

139

tct gat ggc ggg aat gcc gca gca aaa gag tct gac gtg atc gct ctg 48
Ser Asp Gly Gly Asn Ala Ala Ala Lys Glu Ser Asp Val Ile Ala Leu
1 5 10 15

acc gtc tgg aaa tgc tgt acc att cct tcc tgt tat gag aaa aaa aaa 96
Thr Val Trp Lys Cys Cys Thr Ile Pro Ser Cys Tyr Glu Lys Lys Lys
20 25 30

att aaa gca tgt gtc ttt tgacgacgct gatgctccag gaccctctga 144
Ile Lys Ala Cys Val Phe
35

accacgacgt 154

<210> 402
<211> 38
<212> PRT
<213> Conus geographus

<400> 402
Ser Asp Gly Gly Asn Ala Ala Ala Lys Glu Ser Asp Val Ile Ala Leu 48
1 5 10 15

Thr Val Trp Lys Cys Cys Thr Ile Pro Ser Cys Tyr Glu Lys Lys Lys
20 25 30

Ile Lys Ala Cys Val Phe
35

<210> 403
<211> 154
<212> DNA
<213> Conus regius

<220>
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<222> (1)..(114)

<400> 403 48
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Ser Asp Gly Ala Val Asp Asp Lys Ala Leu Asp Arg Ile Ala Glu Ile
1 5 10 15

gtc agg aga gga tgc tgt ggc aat cct gcc tgt agc ggc tcc tcg aaa 96
Val Arg Arg Gly Cys Cys Gly Asn Pro Ala Cys Ser Gly Ser Ser Lys
20 25 30

gat gca ccc tct tgt ggt tgaagacgct gctgctccag gaccctctga 144
Asp Ala Pro Ser Cys Gly
35

accacgacgt 154

<210> 404
<211> 38
<212> PRT
<213> Conus regius

<400> 404
Ser Asp Gly Ala Val Asp Asp Lys Ala Leu Asp Arg Ile Ala Glu Ile 48
1 5 10 15

Val Arg Arg Gly Cys Cys Gly Asn Pro Ala Cys Ser Gly Ser Ser Lys
20 25 30

Asp Ala Pro Ser Cys Gly
35

140

~~conclvd.~~